



# ECHO IRELAND

Journal of the  
Irish Radio Transmitters Society  
April 2010

**IRTS AGM Weekend  
April 24/25th 2010  
Fairways Hotel, Dundalk**

**Dinner on Saturday night**

**Special General Meeting  
Rally and AGM on Sunday  
(details inside)**

**Springtime means antenna time.**

**EI6BT looking along the driven element of a full size  
3 element 40m Yagi**



## Society Officers 2009/2010

President:	Paul Martin EI2CA	087-2523908	paul@comma.ie
Vice President:	Seamus McCague EI8BP	01-2988045	smccague@eircom.net
Hon. Vice-Presidents:	Sean Nolan EI7CD	01-2851599	ei7cd@gofree.indigo.ie
	Dave Moore EI4BZ	087-6290574	ei4bz@eircom.net
Auditors:	Brendan De hÓra, EI3GV; Brendan Lynch, EI6GA		
Secretary:	Ger Gervin EI8CC		Gerry.Gervin@dfa.ie
Treasurer:	Sean Donelan EI4GK	01-2821420	donelansean@gmail.com
P.R.O.	Seamus McCague EI8BP	01-2988045	smccague@eircom.net
AREN Co-Ordinator:	John Ronan EI7IG	086 8167310	ei7ig@aren.ie
Awards Committee:	Peter Grant EI4HX (Chair)	087-7944779	ei4hxp@eircom.net
	Pat Fitzpatrick EI2HX, Pat O'Connor EI9HX.		
ComReg Liaison	Sean Nolan EI7CD	01-2851599	ei7cd@gofree.indigo.ie
Contest Manager:	Thos Caffrey EI2JD	087-2953256	thoscaffrey@hotmail.com
EMC:	Brendan Minish EI6IZ	086-2501832	ei6iz.Brendan@gmail.com
EuroCom	Sean Donelan EI4GK	01-2821420	donelansean@gmail.com
Gaeilge:	Pádraig Ó Meachair EI7GK	0404-67658	ei7gk@esatclear.ie
External Awards/WEIC:	Sean Nolan, EI7CD	01-2851599	ei7cd@gofree.indigo.ie
IARU	Sean Nolan, EI7CD	01-2851599	ei7cd@gofree.indigo.ie
IARUMS	Ger McNamara EI4GXB	087-2532512	ei4gxb@gmail.co
IRTS Shop:	Peter Grant EI4HX	087-7944779	ei4hxp@eircom.net
Membership Officer:	Joe Ryan EI7GY	01-2854250	memrecords@irts.ie
Morse Testing Co-Ord.:	Sean Donelan EI4GK	01-2821420	donelansean@gmail.com
Chief Morse Tester:	Dan Lloyd EI3AE	01-8382774	daniellloyd@eircom.net.
P.O. Box 462	Michael McNamara EI2CL	01-8372493	ei2clmike@eircom.net
Publications Editor:	Dave Moore EI4BZ	087-6290574	ei4bz@eircom.net
Publications Distribution	Sean Donelan EI4GK	01-2821420	donelansean@gmail.com
Radio News Editor:	Charlie Carolan EI8JB	087-6265418	charlie.carolan@gmail.com
Repeater Co-ordinator	John McCarthy EI8JA	087-9437500	ei8ja@eircom.net
Theory Examination	Sean Nolan EI7CD	01-2851599	ei7cd@gofree.indigo.ie
	(Sub-Committee Chairman)		
VHF Manager:	Trevor Dunne EI2GLB	087-2217829	ei2glb@hotmail.com
WAI Awards Manager:	Tom Rea EI2GP	093-35523	tomrea@eircom.net
WAI Book Sales:	Dave Moore EI4BZ	087-6290574	ei4bz@eircom.net
Webmaster:	Gerry Kavanagh EI8DRB	087-7996336	pagemaster@irts.ie

## QSL Bureau

QSL Inwards Manager:	Pat Fitzpatrick EI2HX.	041-9841817	patfitzpatrick@hotmail.com
QSL Outwards Manager:	Tony Baldwin EI8JK		ei8jk@amsat.org
Incoming QSL Sub Managers:			
0/1/Calls & SWL:	John Browne EI7FAB.		
2 Series Calls:	Thos Caffrey EI2JD	087-2953256	thoscaffrey@hotmail.com
3 Series Calls:	Pat Fitzpatrick EI2HX.	041-9841817	patfitzpatrick@hotmail.com
4 Series Calls:	Jim Ryan EI3DP	021-4632365	pamasada11@yahoo.ie
5 Series Calls	Terry Webb EI4GLB	087-6199943	
6 Series Calls:	Rory Hinchy EI4DJB		rhinchy@iee.org
7 Series Calls	Roland Byrne EI4GYB		rolandbyrne@ireland.com
8 Series Calls:	Brian Canning EI8IU	086-2514822	brianei8iu@eircom.net
9 Series Calls:	Dave Deane EI9FBB	083-3317940	ei9fbb@oceanfree.net

## News Bulletins and Readers

<b>Sunday</b>				
Dublin	1100	7.043	SSB	Colm EI3H, Sean EI7CD, Gerry EI8CC, Roland EI4GYB Ger EI4GXB
Wicklow	1130	3.680	SSB	(as Gaeilge) Paddy EI7GK, Danny EI6GS
Dublin	1145	145.525	FM	Tony EI5EM, John EI7JG
Dublin	1200	3.650	SSB	As 1100
Mayo	2000	145.600	FM	John EI7IQ, Padraic EI9JA, Jimmy EI2GCB
Tipperary	2030	145.450	FM	Tommy EI2IT, John EI2JB, Andy EI5JF
Dublin	2130	145.525	FM	As 1145
<b>Monday</b>				
Cork	2000	145.750	FM	Vincent EI7HN
Limerick	2000	145.725	FM	Brian EI9AL, Tony EI2AW
Louth	2000	145.675		Peter EI4HX, Thos EI2JD
Galway	2000	145.550		Steve EI5DD
<b>Tuesday</b>				
Waterford	2130	145.650	FM	Francis EI5GOB

## Contents

<i>Society Officers &amp; Committee Members:</i>	2
<i>Special General Meeting: AGM Notice</i>	3
<i>Special General Meeting details</i>	4
<i>Lough Erne ARC</i>	5
<i>UK Six Metre Group; Trophy Nominations</i>	6
<i>AGM Weekend Details</i>	7
<i>HF Happenings with Dave EI9FBB</i>	8/10
<i>EI1529 WAEDC Contest winner</i>	10
<i>Next IRTS Committee Meeting in Athlone</i>	10
<i>International Monitoring with EI4GXB</i>	11
<i>Contest Calendar</i>	12
<i>Limerick Radio Club AGM &amp; Rally</i>	13
<i>VHF &amp; Up Roundup with EI2GLB</i>	14
<i>Marconi &amp; Salvan by Ita Marguet</i>	15
<i>The HX Files - ATV with EI2HX</i>	16
<i>Crossakiel ARC</i>	17
<i>Continuing with Satellites with EI8JB</i>	18/19
<i>Radio Fun with Peter EI299/G7VEW</i>	20
<i>AREN Financial Report</i>	21
<i>AREN - Frequently Asked Questions</i>	22/23
<i>DXCC &amp; E-QSL EI Listings</i>	24
<i>Donated Kia Rio sold</i>	25
<i>Members Advertisements</i>	25
<i>Enniskillen Rally</i>	26
<i>Scorpion (Advert)</i>	26
<i>Bangor Rally</i>	26
<i>JBT Trading (Advert)</i>	27
<i>South East Communications (Advert)</i>	28

## Is my membership due for renewal?

Your membership renewal date is shown on the wrapper in which the newsletter is posted – above the name and address. For those who receive Echo Ireland by electronic distribution, the renewal date is included in the email alert sent when a new issue is published.

Members who pay by direct debit will see “(DD)” after the renewal date. Those who don’t pay by direct debit receive a renewal notice when their annual subscription is due for payment. Please re-new promptly to ensure your membership continues!

You can renew your membership before it is due, at a Rally, or otherwise. Membership is extended by 12 months from the normal renewal date whenever a payment is received.

*Joe Ryan, Membership Records Officer*  
**memrecords@irts.ie**

**Irish Radio Transmitters Society**  
**Special General Meeting**  
**Sunday, 25<sup>th</sup> April 2010 at 1400**  
**Fairways Hotel, Dundalk**

In accordance with Rule 27.3 of the Rules of the Society members are hereby notified that a Special General Meeting of the Irish Radio Transmitters Society will be held at 1400 on Sunday, 25<sup>th</sup> April 2010 in the Fairways Hotel, Dundalk.

The purpose of the meeting is to consider a proposal by the Committee for amendments to the Constitution and Rules of the Society in accordance with Rules 34.1, 34.2 and 34.3 of the Society's Rules.

**Details of this proposal are carried on page 4 of this issue.**

**Irish Radio Transmitters Society**  
**77th Annual General Meeting**  
**April 25th 2010**  
**Fairways Hotel, Dundalk**

Members are hereby notified that the Annual General Meeting of the Irish Radio Transmitters Society will be held at 1415 on Sunday April 25th at the Fairways Hotel, Dundalk.

**Committee Nominations**

Rule 23.1 requires that the committee shall, at least 28 days notice prior to the Annual General Meeting, send to all paid up members a list showing the nominees for the offices of President and Vice-President and eleven committee positions.

The following are the Committee's nominations;

President	Paul Martin EI2CA
Vice-President	Seamus McCague EI8BP

**Committee**

Pat Fitzpatrick EI2HX  
Thos Caffrey EI2JD  
Ger McNamara EI4GXB  
James Holohan EI4HH  
Peter Grant EI4HX  
Stephen Wright EI5DD  
Brendan Minish EI6IZ  
Joe Ryan EI7GY  
Ger Gervin EI8CC  
Charlie Carolan EI8JB  
Pat O'Connor EI9HX

The names of other members eligible and willing to serve as President, Vice-President or as Committee members shall be added to the list upon receipt of nominations in writing, by any ten paid-up ordinary members in the case of a nominee for the Presidency or Vice-Presidency, or by any two paid-up ordinary members in the case of a nominee for any of the eleven committee positions. (Rule 23.2)

**Silent Key,  
Peter Cuffe G0IEP.**

It is with great sadness that I have to report the passing of **Peter Cuffe**, on 28<sup>th</sup> January 2010, a true gentleman of the Amateur Radio world, at the age of 84.

Peter was born in Leenaun, on the lakeside border of counties Mayo and Galway and his working life was first on Merchant ships, then on the Fleetwood Fishing Fleet, sailing in Arctic waters.

He later became a senior communications officer at sea with Shell Oil Tankers. The halcyon days of a radio operator on all Merchant Navy ships is now long gone but Peter travelled all over the world and had an interesting story from every continent. He could send and receive Morse messages in several languages at commercial speed and eventually retired to Fleetwood, Lancashire, where he passed his RAE with ease.

Peter had a passion for the erstwhile Fleetwood trawler fleet and he produced a remarkable sketch of trawler L.O.72 for his distinctive QSL card.

He was a conscientious and active member of The Knights of St Columba and took his religion very seriously, but he had a superb sense of humour, a very witty man.

He was a great encouragement to me when I 'reclaimed' my lapsed license and a patient mentor when I asked naive questions, catching-up with all I'd missed. He was active on all HF bands and also had an interest in packet radio.

Peter died after a short illness and is survived by his wife Margaret, three sons; John, Tomas, and Peter Jr. and daughters, Philomena and Bernadette - with many charming grandchildren.

His nostalgic contributions at the Thornton Cleveleys Amateur Radio Society meetings will be sorely missed but his memory will stay with us fondly.

The world is a poorer place for his loss.

R.I.P. Peter.

*Peter Mac Dougall MCII,  
EI/G7VEW.*

# Proposed Amendments to the Constitution and Rules of the Society

## Special General Meeting at 1400 April 25th, Fairways Hotel, Dundalk.

The Committee of the Society is proposing a number of amendments to the Constitution and Rules of the Society.

A draft document with the amendments which are considered necessary and which are proposed and recommended by the Committee to the members is available at [www.irts.ie/rules](http://www.irts.ie/rules). For those who may require it, a hard copy of the document is available from Joe Ryan EI7GY at [memrecords@irts.ie](mailto:memrecords@irts.ie)

The main changes proposed in the existing Constitution and Rules relate to:

- Simplifying admission to membership
- Ensuring that the Rules reflect current practice
- Confining Committee voting rights for the future to elected and co-opted Committee members (Rules 9.1 and 9.6)
- Clarifying how voting is to be conducted at General Meetings (Rule 28.2)
- Consolidating in one new Rule (29.1) the provisions relating to the expulsion of a Member (Rule 8.1), the removal of an Officer (New Rule 15.3) and the termination of the affiliation of a Club, Society or other Body (Rule 3.6).

The significant changes proposed to the Constitution and Rules and the reasons for them are set out below.

There are also some explanatory notes on the draft Constitution and Rules document which members will find helpful.

## Constitution

### Paragraph 2: Objects:

Two new objects have been added: these make formal provision for the IRTS role in representing the interests of members both Nationally and Internationally and facilitating and encouraging radio experimentation.

### Paragraph 3: Membership:

At present Rule 2.1 requires that candidates for membership be nominated by two persons of standing. The Committee is of the view that membership should be open to any person interested in the Objects of the Society. The proposed amendment of this paragraph and Rules 1.1 and 2.1 is to give effect to this. There are some other consequential changes e.g. 'election to membership' is changed to 'admission to membership', wherever it occurs.

## Rules

### Membership: Rule 1.1:

The existing Rule defines a number of membership categories. It is felt that a formal definition of membership categories is inflexible. However, it is proposed to amend Rule 4.1 to allow the Committee to approve different subscription rates based on a range of factors including location, licence status or personal circumstances of members.

### Affiliation: Rule 3.1:

Makes it clear that affiliated organisations do not have a vote at general meetings and do not have any interest in the property of the Society i.e. affiliated organisations are not members of the Society and do not exercise the rights of members.

### Committee: Rule 9.1:

It is proposed to make a significant change to this Rule.

Representatives of affiliated Clubs, Societies or other Bodies and Regional Representatives will no longer be formal members of the Committee and will not have a vote (Rule 9.6).

They will, however, be entitled to attend Committee meetings and participate fully in all discussions.

To compensate for this, it is proposed to amend Rule 9.4 to require the Chairman, so far as possible, to try to reach decisions by consensus. This is in effect what happens at present as formal votes are rarely taken at Committee meetings.

The reasoning behind this proposed change is that a change is being proposed to Rule 16.1 to allow a club, society or other body with at least five (instead of fifteen) IRTS members to affiliate to the Society and send a representative to Committee meetings. This reflects the tendency for smaller clubs to be formed.

Hopefully, it will result in more effective communication with clubs and in a broader range of representative opinion being available at Committee meetings. In broadening representation to include smaller clubs, the Committee considers it appropriate to confine formal membership of the Committee and voting rights to the elected and co-opted Committee members.

For the future it is proposed (Rule 17.2) that Regional Representatives may be appointed annually by the Committee.

It obviously would not be appropriate to confer voting rights on functionaries appointed by the Committee.

A Committee member who is appointed as a Regional Representative would of course retain voting rights as a formally elected Committee member.

### Officers: Rule 15.3:

This is a new Rule which proposes to provide for the removal of an Officer. It also defines the term 'Officer' which is important in the context of the new Rule 29.1 which sets out the proposed procedure to be followed in the expulsion of a member, removal of an officer or the termination of the affiliation of a club, society or other body.

### Hon. Secretary and Hon. Treasurer: Rules 19.1 and 20.1:

These two Rules consolidate the existing four part Rules for each of these Offices, bring them into line with current practice in terms of duties and responsibilities and set these out in a more readable form.

### Annual General Meeting: Rule 26.3:

The proposed revision requires that an Agenda for the AGM be included in the required 28 day notice of the AGM.

### Special General Meeting: Rule 27.3:

The proposed revision requires that the period of notice for a Special General Meeting be increased from 14 to 28 days bringing it into line with the period of notice required for the AGM.

*(Continued on page 5)*

(Continued from page 4)

**Voting at General Meetings: Rule 28.2:**

The proposed revision makes it clear that voting at General Meetings will be conducted by a show of hands and matters will be decided by a simple majority with the exception of a contested election for the Office of President, Vice President or membership of the Committee (where a postal poll is required), the expulsion of a member, removal of an officer or termination of an affiliation (where a secret ballot is required) or an amendment of the Constitution and Rules where a two-thirds majority of those present and voting is required.

**Voting: Rule 28.10:**

Proposes that a decision on the validity of any voting paper be solely a matter for the scrutineers.

The present Rule requires them to take into account advice given to them by the Committee.

Having considered this, the Committee cannot see how or why the Committee could or should be involved in such a matter.

**Expulsion of a Member, Removal of an Officer or Termination of an Affiliation; New Rule 29.1:**

This proposal brings together the provisions about these matters in one new Rule which is based partly on the existing Rules.

The proposed procedure to be followed is clearly set down in subparagraphs (a) to (d) and complies with the requirements of natural and constitutional justice.

**Trustees: Rule 32.1:**

The proposed revision makes it clear that the Trustees hold the Society's interest in property and investments for the benefit of members and are not beneficially entitled to any property or assets of the Society.

**Trustees: Rule 32.2:**

The proposed revision makes it clear that the indemnity by the membership does not apply where the Committee or the Trustees acted negligently or in bad faith.

## **Eighteen New Foundation Licensees at Lough Erne Amateur Radio Club**



### **Ladies First on Air**

All 18 from Lough Erne Amateur Radio Club's Foundation course at the SHARE centre passed the examination on Sunday 21st February after a two-weekend course.

By Thursday they were downloading their new licenses from OFCOM. Three women, all from Rosslea, were the first on air, using the Fermanagh Repeater GB3CP. They were Fidelma MI6UIM, Shauna MI6SHF and Noreen MI6NCC.

Welcome ladies to amateur radio!

These 18 new licensees range in age from 13 to 78 years, and include four women and three SHARE staff.

The Club is most grateful to SHARE, whose staff and facilities were invaluable, particularly the ten computers linked by wireless to a website used for exam question practice.

At the Club's Rally in SHARE on 11th April, Billy Pollock G13NVW, himself over 50 years licensed, will present Welcome to Amateur Radio Certificates to these 18 and other new Foundation licensees.

For more information contact Michael M15MTC, Chairman Lough Erne ARC.



## UK Six Metre Group

[www.uksmg.org](http://www.uksmg.org)

The UK Six Metre Group is open to amateurs worldwide and has the following aims:

- The first aim is to encourage wider use of the six-metre band especially in countries with few or no resident operators and be a strong advocate for maintaining and extending band privileges.
- The second aim is to provide topical and vital information that extends enjoyment and learning from the six-metre band.
- The third aim is to encourage and publish research into propagation and technical developments.
- The fourth aim is to provide a "hobby group" for all those interested in the use of the six-metre band and maximise opportunities for members to be involved in the running of the Group.
- The fifth aim is to encourage good practice in the use of the six-metre band.

As the New Sponsorship Manager and Editor of 'What's on Six' with the U K Six Metre Group, Ian G6TGO announces that on Sunday 11th April 2010 at the NARSA Exhibition in Blackpool, he will be setting up a stand to showcase the UKSMG and its involvement with 50MHz. He will have a Digi mode demonstration station in operation in the mode of WSPR or Weak Signal Propagation Reporting on 50.293 MHz.



He would be delighted if any EI stations would like to participate to see if he can decode direct from the Rally across the Irish Sea.

QSL cards would be sent direct for any confirmed spot under the callsign of G6TGO.

If anyone would like to help then please let him know directly by email to: [sponsorship@uksmg.org](mailto:sponsorship@uksmg.org)

## Lough Erne Club Northern Ireland Section of the RSGB Club of the Year

Congratulations to the Lough Erne Amateur Radio Club are were announced by RSGB Regional Manager Peter M5JYK as the winners of the RSGB Regional Club of the Year (Northern Ireland Section).

They narrowly won by beating West Tyrone and Bangor in what was a very tight fought competition.

LEARC will get their Trophy and certificate at the Lisburn Rally in March.

As a result LEARC will be entered into the RSGB's National Club of the Year contest in which they will compete against the other winners of the other Regions for a £1000 prize donated by Kenwood.

We wish them well in the next stage of the competition and hope they land the overall prize.

## Brendan Trophy attempt this Summer

Fred, DM8MM, plans another activity from VO1 (grid GN37) in June / July 2010. He will be well equipped on 2m and looks for possible sked partners from Ireland. He would be happy if someone could consider a portable operation from the EI west coast.

Please contact Fred via email if you are interested: [flichtenthaeler@gmx.de](mailto:flichtenthaeler@gmx.de)

## Trophy Nominations

The following trophies are awarded for services to the hobby or the society at the Annual General Meeting:

Arup Cup

Michael Collins Memorial Trophy

Pat Conway Memorial Trophy

Nominations are now invited for these awards and may be from clubs or individuals, must be in writing and can be forwarded to the awards committee by regular post to Chairman of the awards sub-committee Peter Grant EI4HX, QTHR or by e-mail to: [ei4hexperimental@eircom.net](mailto:ei4hexperimental@eircom.net)

Nominations may also be submitted to either Pat EI2HX or Pat EI9HX members of the awards sub-committee.

### Home Construction

There are two awards on offer for home construction.

**The Folan Shield** is awarded for home constructed equipment built to the highest standard and a technical write-up including the specification of the item is required.

**The Kevin Freeny Trophy** is also awarded but does not require the technical write-up.

Entries for these awards should be presented to the Awards sub-committee on the day of the AGM.

Advance notice of your intention to enter would be appreciated.

Entries are also invited for the operating awards:

the 4m and 6m Shields, the Slievenamon Trophy for 70cms and the Ian Morris Trophy for Shortwave Listeners.

## Echo Ireland as PDF.

If you would like to receive Echo Ireland by way of electronic download, and so help to reduce the Society's postage bill, please advise the Membership Records Officer.

Include your call sign and email address in the request, and send it to:

**[memrecords@irts.ie](mailto:memrecords@irts.ie)**



# Irish Radio Transmitters Society

## AGM Weekend



Presented by

## Dundalk Amateur Radio Society

Fairways Hotel, Dundalk, Co. Louth

**Saturday 24th April - IRTS Dinner, 8pm**

(Tickets from IRTS committee members €35)

**Sunday 25th April - Radio Rally**

Doors open 11:00 am Adm. €5.00

**Special General Meeting 1400;    Annual General Meeting 1415**



### Radio Rally

- All the top Traders
- Astronomy Ireland
- Irish Army Comms.
- CTI Computers
- Bring 'n' Buy
- Raffle
- CW Testing



### Attractions

- De Lorean sports cars
- AREN
- Coast Guard
- Fire Brigade
- Veteran Car Club
- Dundalk FM 100

*DXCC Card Checking Available*

So bring your cards!

Talk-In on 145.675 Dundalk Repeater

For more info visit [www.ei7dar.com](http://www.ei7dar.com)



# HF Happenings

with Dave Deane EI9FBB

Welcome to the latest edition of HF Happenings. It doesn't seem all that long ago since we last put pen to paper for this column. After all, they say that 'Time flies when you're having fun'! That is certainly the case and as I'm sure many of you will agree. The introduction to a regular daily sunspot count is most welcomed and has been much awaited. February was the first month in the last 3 year period that had a daily sunspot number for the entire month. As predicted, regular daily openings on the higher HF bands are to be enjoyed and some rather spectacular DX is there for the taking. VK, JA, HL, VR2, JT & many others are on most days for the taking. Time to start getting your 10/12m antennas back in action and in check for these bands. And remember, even if you can only manage modest antenna for the 10,15 & 20m bands, other alternative CB type verticals are readily available quite cheaply and are rather effective on 12m & 17m too.

## A92IO - Bahrain

Dave, EI3IO as we all should know, is now QRV from Bahrain and has been issued the call, A92IO. Operating from Sar, in the Northern region of Bahrain, Dave is mainly active from 80m to 10m for the moment, however, does intend to be QRV on 160M for the next Low band season. Dave is also hopeful for the general release of the 6m band to Bahraini amateurs sometime in early 2010. Up to now, A9 has not been allowed access to the 6M band so let's keep our fingers crossed on this one. If it does materialise, Dave already has his 6M station in place. Running an Elecraft K3, Acom 1000 amplifier, A3S tri-bandner, R7 vertical, 17m/12m rotary dipole and various wire antennas for the lower bands, A92IO has already been worked from 80m right through to 15M in EI. As an added bonus, Dave also up-loads regularly to both LoTW & eQSL.

Dave will be operational until at least August 2011.

For further information on all Dave's operations, take a look at his impressive web page at :

<http://www.connouge.com/ei3io>

## ZL8X - Kermadec Islands.

DL1MGB says final approval has been granted by New Zealand's Department of Conservation for a landing on Raoul Island in the Kermadecs, ZL8, and a stay of 18 days. The charter boat has also been lined up, the well-known Braveheart with Captain Nigel Jolly. The ZL8X callsign was secured last November.

Here is the ZL8X timeline:

Team departs New Zealand November 18.

Team arrives on Kermadec November 19.

On-air operation: November 19-December 5.

Station disassembly, boat loading and departure: December 7.

Arrival in New Zealand, December 10.

This is a large operation, with these 13 operators: DJ5IW, DJ7EO, DJ9RR, DK1II, DL1MGB, DL3DXX, DL5CW, DL5LYM, DL5XL, DL6FBL, DL8OH, DL8WPX and SP5XVY.

The ZL8X web site is [www.kermadec.de](http://www.kermadec.de).

## 3W6C - Vietnam.

Preparations continue for the 3W6C Con Co Island, Vietnam expedition, with departure for the island in early April. Last operators are being added to the team and the final pieces of equipment are being pulled together.

Organizers say all the pieces are falling into place. The operators will fly on an A380 from Zurich to Singapore, then on to Vietnam. All the laptop logging computers have been set up with the logging software. The last shipment of gear being sent on ahead goes out early this month, March. The team expects to be on the air April 10-18 with four stations on "24/7," emphasizing the low bands and targeting North America and Europe.

The 3W6C Website can be found at [www.3w6c.qrv.ch](http://www.3w6c.qrv.ch).

## KH0 - North Mariana Islands.

K1HP/KH0, operator Yoshi, Japanese callsign JE2EHP, will be on Saipan in the Mariana Islands and operating March 21-25. He will be on HF and 6, CW, SSB and RTTY.

QSL to his JE2EHP callsign via the bureau.

## Honduras.

HR2/NP3D will use the HQ2T callsign in Honduras March 19-29, active on the HF bands, focusing on 160 CW, SSB and RTTY. And, he will be in the CQ WPX SSB Contest March 27-28 single operator all band. QSL via W3HNC, RW6HS or LoTW.

## YI9PSE - Iraq.

The multi-national YI9PSE team continues to make preparations for their March 31st departure to Erbil, Iraq. They have added some last minute operators to the team. All of their equipment is ready to go with the last shipment schedule for early this month. The YI9PSE group is on schedule for their April 2-12 DXpedition to the Kurdistan area in northern Iraq. The majority of the team will depart for Vienna, Austria on April 1st followed by a departure for Kurdistan the next day. An advanced team of three will be there and ready when the team arrives on the second of April. The YI9PSE laptops are read to log your QSOs and they will be uploading their logs daily to Club Log

([www.clublog.org](http://www.clublog.org)). The "24/7 DXpedition" will emphasize low band activity targeting North America and Europe. They will also be concentrating their attention towards the US West

(Continued on page 9)





(Continued from page 8)

Coast and the Pacific (VK/ZL, etc). You can keep up with the full details of YI9PSE on their Website ([www.yi9pse.com](http://www.yi9pse.com)) and via twitter (<http://twitter.com/YI9PSE>), where they are expected to "announce activity on the General Class portions of the bands."

#### **V63DX – Micronesia.**

Japanese ops JA7HMZ, JA1ADT and JA7GYF will be QRV from Pohnpei (OC-010) Federal States of Micronesia between April 11 and 17 as V63DX, V63DQ and V63T respectively. They will be on all bands and modes.

QSL via their home calls.

#### **S79GM – Seychelles.**

S79GM in the Seychelles will be GM0GAV and GM3YTS, March 21-April 1, QRV on all bands with a focus on LF, mostly CW, some RTTY.

<http://s79gm.blogspot.com/>.

Gav and Rob can only transmit above 7050 or so on 40M, so look for them on 40 CW at around 7050, listening on 7025 or thereabouts. They will upload some detailed frequency info on their blog.

All the QSOs will be uploaded to Logbook of the World when they get home, and they also hope to upload logs during the expedition - keep an eye on <http://www.clublog.org/charts/?c=S79GM>.

#### **5W0OX – Samoa.**

The UDXT, Ukrainian DXpeditioners Team, has a new project, "Pacific Odyssey 2010." On the team are UX0HX, RK3FA, UT5UY, UT1HF, US7UX, UR3HR and SWL Yuriy Grushevskiy. The plan: 5W0OX on Samoa, May 18-19; T31X, Central Kiribati, May 22-June 1; and ZK3X, Tokelau, June 2-6.

T31 is ranked most needed #7 in Europe, #19 worldwide.

Tokelau is #29 in Europe and #35 worldwide.

Donations are appreciated because costs are expensive to these far-flung islands.

<http://www.uz1hz.com/pacificodyssey.html>.

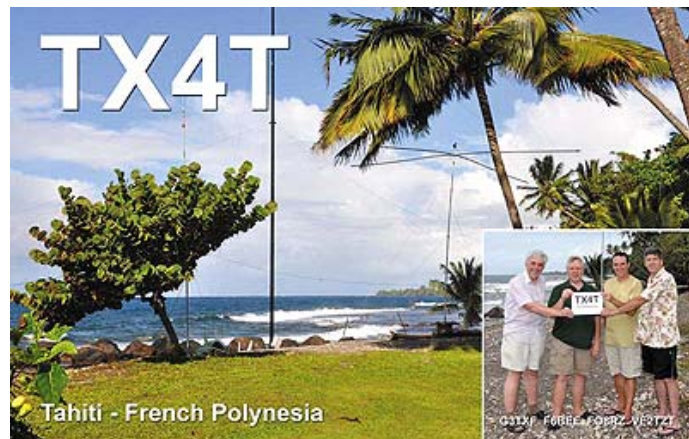
#### **MS0INT – IOTA EU-118.**

MS0INT will be on from the Flannan Isles, EU-118, between June 18-21.

Activated in 1989, 1995, 1999 and 2002, the "mysterious Flannan Isles" are certainly a much needed IOTA. They are "extremely difficult to access" due to North Atlantic weather systems constantly eroding the only two available landing sites. But this team describes itself as "determined." Weather and seas permitting, the activation will be attempted by EA1DR, EA2TA, EA3NT, MM0NDX, F4BKV and SM0MDG. With a little over 12 weeks to go before this tricky IOTA activation, the team would like to remind enthusiasts to visit the MS0INT website for more details on the expedition and how you can support/assist them.

See <http://www.ms0int.com/index.php?d=home> for further details.

DXers are expecting big things from what is now known as "The Netherlands Antilles" this fall, perhaps, and "new ones" to work when "governance" and independence are worked out there. Three members of the SEDXC club and the K5D Desecheo team, K4UEE, W6IZT and N4GRN, will be on Saba March 11-15 operating PJ6/home call, as they finalize plans and begin building a station to be ready for the upcoming po-



litical realignment later in the year. QSL to their home calls.

GB2SPD is a special Northern Ireland (GI) callsign for St. Patrick's Day, March 17th. The QTH will be Slieve Gallion Mountain in the Sperrins, County Derry. The operation may last up until March 21.

80, 40 and 20M are planned and some VHF. Due to the mountaintop location and the season, the weather will be a facto

#### **Andorra.**

Andorra's ham organization, URA, Unio de Radioaficionats Andorrans, has a certificate available for its 30th anniversary. Members of the club will be active during April with C35 and C36 prefixes and special commemorative QSL cards. The award is available to any ham or SWL.

Find the target stations on any band or mode; awards will be mixed mode only. The dates are April 1-30, 2010. You must contact four different Andorran stations, at least one from each of these two prefixes. Special callsigns C37URA and C37NL will also be on with a third prefix as "jokers" and count as two QSOs each. Send your request and log extract by September 30, 2010, to:

Unio de Radioaficionats Andorrans,

P.O. Box 1.150 AD553 Andorra la Vella, ANDORRA The fee for the Andorran award is 15 IRCs, 10 Euros or 15 USD.

Awards will be mailed out after September 30.

VE8EV will be on Greens Island, NA-182, April 15-20. He will be on the HF ands near the popular IOTA frequencies. QSL direct, LoTW, OQRS or bureau to VE8EV. Logs will be put on-line shortly after the operation. [ve8ev.blogspot.com/search/label/IOTA](http://ve8ev.blogspot.com/search/label/IOTA).

Iceland's Post and Telecom Administration (PTA) has granted temporary experimental access to both the 4 and 600 meter bands starting February 19, 2010, says TF2JB, Jonas Bjarnason, Islenskir Radioamatorar (IRA) President.

TF stations with "N" or "G" class licenses can now operate between 493 and 510 KHz and 70.000 and 70.200 MHz running 100 watts, after obtaining a special license from the PTA. Operations on both bands are on a secondary basis.

During the months of March, April, September and October 2010 special event station ON30ON (Oscar November Thirty Oscar November) will be active to commemorate the 30th edition of the Belgian "ON Contest".

The contest was first organized in 1980 to celebrate the 150th anniversary of the Kingdom of Belgium. Since then, the yearly

(Continued on page 10)

(Continued from page 9)

event, which runs for just four hours, has become increasingly popular. QSLs for ON30ON go via the UBA bureau or direct to ON4CAS. A free special certificate can be achieved with full details at <http://users.telenet.be/egbert.hertsen/on30on.html>.

#### **TX4T – French Polynesia.**

February 9<sup>th</sup> to 25<sup>th</sup> saw lots of activity from French Polynesia. Operating from just outside Tahiti, FO8RZ, F6BEE, G3TXF & VE2TZZ were QRV as TX4T on all bands with a strong emphasis on 160m / 80m. Although this is a difficult path, this team were worked from 160m to 12m. 17 individual EI's made it through with EI7BA working them on an amazing 10 band/ mode slots.

At time of print, all QSOs have been uploaded to LoTW however, anyone needing a paper card, should QSL to Nigel, G3TXF via his QRZ.com address.

Here is the list of EI's that made it through to TX4T.

10	EI7BA	1	EI8FH
5	EI9FBB	1	EI8DD
4	EI9JF	1	EI8FS
3	EI4CF	1	EI5AK
2	EI8H	1	EI5GM
2	EI9JU	1	EI8GHB
2	EI2JD	1	EI7CC
1	EI9O	1	EI3GZ
1	EI6IZ		

Finally, apologies to all who sent in their log extracts for inclusion this month.

It is great to see many taking advantage of the daily openings on the higher HF bands, i.e. 10,12 & 15m. Had we forgotten the properties of these bands and how good these bands can be?

For a reminder, call CQ occasionally and be ready to work many AF/AS/NA & SA stations.

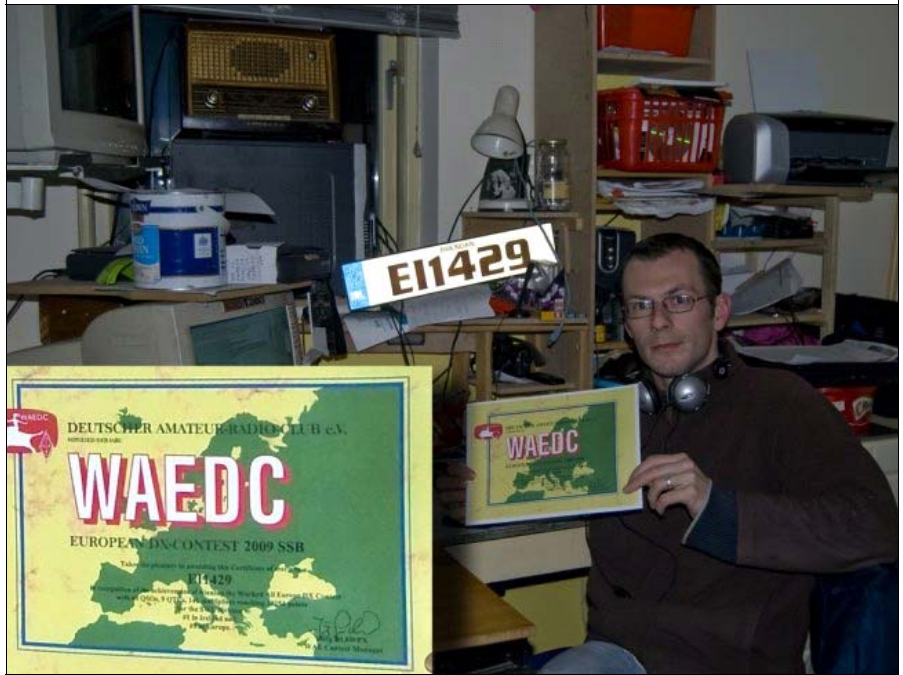
From my own personal log, 78 DXCCs have been worked on 12m these past few weeks containing 24 CQ zones and 17 US states.

Even our own VHF columnist, Trevor EI2GLB has also been very active on these bands yielding some tremendous results. 20m is still the band of choice for the next month or so, however, the other bands can be both fun and exciting and are definitely worth a listen from time to time.

As usual, thanks to Bernie W3UR of the Daily DX for the use of his bulletins.

Vy 73 till next issue es best DX.  
de Dave EI9FBB

## **Brendan EI1429 achieves 1st Ireland and 5th Europe in WAEDC Contest 2009**



Congratulations to Mayo Photographer and Short Wave Listener Brendan Nutley pictured with his certificate from the German National Society DARC that confirms his achievement in being 1st place Ireland and 5th place Europe in the 2009 WAEDC European DX Contest.

## **Next IRTS Committee Meeting**

**Saturday April 10th at 1100**

**Shamrock Lodge Hotel,  
Athlone**



**The Daily DX** - is a text DX bulletin that can be sent via e-mail to your home or office Monday through Friday and includes DX news, IOTA news, QSN reports, QSL information, a DX Calendar, propagation forecast and much, much more. With a subscription to The Daily DX you will also receive DX news flashes and other interesting DX tidbits.

*Subscriptions are \$49.00 for one year or \$28.00 for 6 months.*



**The Weekly DX** - is a product of The Daily DX that can be sent weekly to your home or office via e-mail in the form of a PDF (portable document format). It includes DX news, IOTA news, QSN reports, QSL information, a DX Calendar, propagation forecast and graphics.

*Subscriptions are \$27.00 for one year.*

Get a free two weeks of The Daily DX or a free sample of The Weekly DX by sending a request to [bernie@dailydx.com](mailto:bernie@dailydx.com).





# International Amateur Radio Union Monitoring System

with Ger McNamara EI4GXB

ei4gxb@gmail.com

Welcome to the March edition of IARUMS news, and hopefully you are getting some antenna work done as the evenings get longer. Many thanks to all who have contacted me since the last issue. I am still catching up on replying to people who have made contact with me, but with work commitments this is not happening as quickly as I would like to, but progress is being made.

Keep the reports coming as they are much appreciated and we can all help in keeping our amateur bands free of intruders.

Here is an extract of the latest monitoring efforts. Intruder News from: March 17th 2010

kHz	UTC	Date	ITU	Ident	Mode	BD	SH	Details
3500.000	1700	dly	E	names	USB			Spanish fishery
3622.500	2000	dly	J	JMH	F1C			Tokyo Meteo, WXfax, 120 rpm, IOC576
7000.000	2110	16.03.10	IND		noise			wideband noise – 6960 – 7200 kHz
7001.600	1500	04.03.10	ISR		PSK4	75	2700	MIL188-110A – hybrid modem – ser./par.
7011.800	1400	01.03.10	BIH		PSK8	2400	2600	MIL188-110A - Sarajevo
7016.000	0500	dly	GEO		OFDM	30	2900	OFDM 93 – Tiflis, Georgia
7018.000	vt	dly	RUS	REA4	F1A/B	50	1000	RUS Airforce Moscow, ident 0h + 41 min
7026.000	ady	dly	RUS		PSK2	120	2600	AT3004D – area of Moscow - screenshot
7038.700	ady	dly	UKR	D	CW			beacon “D” - Sevastopol
7038.800	ady	dly	RUS	P	CW			beacon “P” - Kaliningrad
7038.900	ady	dly	RUS	S	CW			beacon “S” - Murmansk
7039.000	ady	dly	RUS	C	CW			beacon “C” - Moscow
7039.200	ady	dly	RUS	F	CW			beacon “F” - Vladivostok
7039.300	ady	dly	RUS	K	CW			beacon “K” - Petropavlovsk
7044.340	1800	dly	RUS		FSK15?		2700	area of Novosibirsk – undefined noise
7050.000	2015	07.02.10	CHN		P0N			Chinese Radar – 43.5 pps
7054.000	vt	dly	RUS		F1B	50	200	RUS MIL Moscow – morning and evening
7070.000	vt	dly	CHN	no ITU	FSK8	125	1750	ALE, “288” “514” – PRC - PLA
7089.500	1238	dly	UKR		F1C			WX-fax - 60 rpm – IOC 576 - Sevastopol
10107.000	0800	dly	RUS		CW			dots, 20 msec, Novosibirsk, navigation?
10131.400	0800	dly	E	names	USB			Spanish fishermen, “Carlos”
10147.000	1400	22.11.09	FEa	Bora	LSB			Far or Middle East pirates, “Bora Bora”
14001.000	vt	dly	CHN	no ITU	FSK8	125	1750	ALE, “272” “482” - PRC-PLA
14036.000	1115	04.01.10	RUS	REA 4	F1B	50	2000	2nd from 7018 – Russian AF Moscow
14052.000	1000	09.03.10	RUS		PSK2	120	5200	AT3004D - 2nd from 7026 - screenshot
14139.000	vt	dly	CHN	no ITU	FSK8	125	1750	ALE, “597” “809” – PRC-PLA
14166.000	vt	dly	CHN	no ITU	FSK8	125	1750	ALE, “867” “963” - possibly PRC-PLA
14180.000	1340	18.01.10	UKR		F1C			WXfax, 2nd from 7090, RUS Navy Sevast.
14295.153	vt	dly	TJK		A3E			3rd from 4765 – Radio Tajikistan
14337.000	vt	dly	CHN	no ITU	FSK8	125	1750	ALE, “143” “246” – PRC-PLA
21001.500	0700	dly	RUS		F1B	100	140	ACF = 0 - RUS MIL - Jekaterinburg
21390.000	0850	15.02.10	RUS		F1B	50	3000	6th from 3565
28305.000	1645	17.03.10	B	names	A3E			CB-like traffic from Brazil, strong

UTC = universal time coordinated (=GMT) /// ady = all day /// vt = various times /// dly = daily /// vd = various days  
date (dd.mm.yy) /// IDENT = call, selcall /// MODE = USB, LSB, A3E = AM, F3E = FM, F1B (= FSK), G7B, J7D  
ALE = MIL-188-141A /// NWAf = North West Africa /// con = continuous ) /// ITU = ITU-abbreviation /// BD = baud  
/// SH = shift (Hz) /// DETAILS = observed details /// uniden (ui) = unidentified /// AF = Airforce /// MOI = Ministry of Interior  
/// MOD = Ministry of Defense /// MFA = Ministry of Foreign Affairs /// MEa = Middle East /// FEa = Far East /// EAf = East  
Africa /// CAf = Central Africa /// CIS = Community of Independent States (earlier UDSSR) /// NAf = North Africa /// NEu =  
Northern Europe /// PRC = People’s Republic of China /// PLA = People’s Liberation Army (China) /// pps = pulses/second  
(Radar) /// CIS = Community of Independent States /// emba = embassy /// DPRK = Democratic People Republic of North  
Korea /// NGO = Non Governmental Organization /// MOPO = Ministry of Public Order /// FSK = frequency shift keying ///  
PSK = phase shift keying

Keep the reports coming as they are much appreciated and we can all help in keeping our amateur bands free of intruders.

73 de Ger, EI4GXB

# Contest Calendar

All Times UTC

## April 2010

1-31	Fri 0000 - Fri 2359	CQ DX Marathon - All Jan-Dec	
3- 4	Sat 0000 - Sun 2400	*?* Montana QSO Party	All
3	Sat 0400 - 0800	LZ Open 40 m Sprint Contest	CW
3- 4	Sat 1500 - Sun 1500	SP DX Contest	CW/SSB
3- 4	Sat 1600 - Sun 1600	EA RTTY Contest	RTTY
3- 4	Sat 1800 - Sun 0500	Missouri QSO Party (1)	CW/SSB
4	Sun 1800 - 2359	Missouri QSO Party (2)	CW/SSB
<b>5</b>	<b>Mon 1300-1500</b>	<b>IRTS 2m Counties Contest</b>	<b>SSB/FM</b>
5	Mon 1900 - 2030	RSGB 80m Club Championship	CW
10-11	Sat 0700 - Sun 1300	Japan International DX Contest	CW
10-11	Sat 1200 - Sun 1200	Radio Maritime Day	CW
10	Sat 1600 - 1959	EU Sprint Spring	CW
10-11	Sat 1800 - Sun 0359	Georgia QSO Party (1)	All
10-11	Sat 1800 - Sun 1800	QCWA QSO Party	All
10-11	Sat 2100 - Sun 2100	Yuri Gagarin International Contest	CW
11	Sun 0800 - 1200	Internat. Vintage Contest (1)	AM/CW/SSB
11	Sun 1400 - 2359	Georgia QSO Party (2)	All
11	Sun 1400 - 1800	Internat. Vintage Contest (2)	AM/CW/SSB
14	Wed 1900 - 2030	RSGB 80 m Club Championship	SSB
16-17	Fri 2100 - Sat 2100	Holyland DX Contest	CW/Digital/SSB
17	Sat 0000 - 2359	TARA Skirmish Digital PFX Contest	Digital
17	Sat 0500 - 0859	ES Open HF Championship	CW/SSB
17	Sat 1600 - 1959	EU Sprint Spring	SSB
17-18	Sat 1600 - Sun 0400	Michigan QSO Party	CW/SSB
18	Sun 1200 - 1800	Ontario QSO Party (2)	CW/SSB
22	Thu 1900 - 2030	RSGB 80 m Club Championship	PSK/RTTY
24-25	Sat 1200 - Sun 1200	SP DX RTTY Contest	RTTY
24-25	Sat 1300 - Sun 1259	Helvetia Contest	CW/Digital/SSB
24-25	Sat 1600 - Sun 0159	Florida QSO Party (1)	CW/Phone
24-25	Sat 1700 - Sun 1700	Nebraska QSO Party	All
25	Sun 1200 - 2159	Florida QSO Party (2)	CW/Phone
26-30	Mon 0000 - Fri 2359	EUCW/FISTS QRS Party	CW

## May 2010

1- 2	Sat 1600 - Sun 0400	Indiana QSO Party	CW/Phone
1- 2	Sat 2000 - Sun 1959	ARI Int. DX Contest	CW/SSB/RTTY
1- 2	Sat 2000 - Sun 0500	New England QSO Party (1)	All
2	Sun 1300 - 2400	New England QSO Party (2)	All
3	Mon 1900 - 2030	RSGB 80 m Club Championship	SSB
8- 9	Sat 1200 - Sun 1200	A. Volta RTTY DX Contest	RTTY
8- 9	Sat 1200 - Sun 1159	CQ-M Int. DX Contest	CW/SSB
8- 9	Sat 1500 - Sun 1500	Day of the Portuguese Navy	CW/SSB
8	Sat 1700 - 2100	FISTS Spring Sprint	CW
12	Wed 1900 - 2030	RSGB 80 m Club Championship	PSK/RTTY
15-16	Sat 1200 - Sun 1200	H. M. The King of Spain Contest	CW
15-16	Sat 1500 - Sun 1500	Day of the Portuguese Navy	PSK/RTTY
16	Sun 1000 - 1400	Worked All Britain Contest	Phone
20	Thu 1900 - 2030	RSGB 80 m Club Championship	CW
22-23	Sat 1200 - Sun 1200	EU PSK DX Contest	BPSK63
29-30	Sat 0000 - Sun 2359	CQ WW WPX Contest	CW

## June 2010

<b>5-6</b>	<b>Sat 1400 - Sun 1500</b>	<b>CW Field Day</b>	<b>CW</b>
<b>20</b>	<b>Sun 1400-1700</b>	<b>IRTS 80m Counties Contest</b>	<b>CW/SSB</b>

## July 2010

<b>3-4</b>	<b>Sat 1400 - Sun 1400</b>	<b>VHF/UHF Field Day</b>	<b>CW/SSB/FM</b>
------------	----------------------------	--------------------------	------------------

## Mid-Ulster ARC New Callsign

The Mid Ulster Amateur Radio Club have a new callsign - MN0VFW, which the club will be using for all its future activities.

GI3VFW which was donated by Stanley Eakins in 1982 will continue as the clubs historical callsign, due to its long and enjoyable history.

The club members hope to have as much success and enjoyment with the new call as they had with the old call.

## Wicklow Radio Club

The March meeting of the Wicklow Radio Club featured Paul EI5DI doing a demo on his logging software and it has been decided to enter the CW Field Day contest on June 5/6 so those of you interested please come forward.

Even if you don't know or operate CW it will be great to get involved in other activities, logging, antenna erection etc.

Next meeting is confirmed for Wed 14th of April at 19:30.

Hope to see you all there

## Short Contest Callsigns in the UK

Ofcom is to make available to individuals special short contest call signs, they had previously only been available to clubs. The call sign will consist of G or M, a regional locator if applicable, a chosen digit and a chosen suffix letter, e.g. G8Z or GW8Z etc.

520 call signs have been made available: (G)(\*)(digit)(A-Z) and (M)(\*)(digit)(A-Z). (\*Regional locator where relevant as listed in the licence).

Ofcom Amateur Radio page  
<http://www.ofcom.org.uk/radiocomms/ifi/licensing/classes/amateur/>

## D-Star MB6NI

Northern Ireland has its first D-STAR "Hot Spot". Callsign MB6NI

A hot spot provides access onto the D-Star network and MB6NI is located in Carrickfergus and was a project of GEARS to get more D-Star access in the Greater Belfast, Belfast lough areas.

The spot is run by Brian GI6DKQ and the plan is to try and get more clubs or individuals to put up there own spot and create a hot spot network covering Northern Ireland.

The spot is running on 145.2125MHz

Further information can be had from Brian GI6DKQ



## Lough Erne Repeater Meeting

Brendan Rooney EI6CS, Keeper of the Sligo Repeater said "thank you for bringing us together for a very useful evening". His was a typical comment among a strong gathering of 30 radio amateurs and experimenters convened by Lough Erne Amateur Radio Club on Wednesday February 10th to thank those who provide Repeaters and encourage greater use of Repeaters.

The meeting was in the SHARE centre which is also the venue for the Club's rally on Sunday 11 April.

John McCullagh GI4BWM, Chairman of RSGB's Emerging Technologies Coordinating Committee gave an excellent exposition on the design and building of Repeaters. There followed much sharing of experiences among Keepers, including Billy Pollock GI3NVW Keeper of the West Tyrone Repeater, GB3WT.

The host Club's Herbie Graham GI6JPO gave a demonstration of cavity tuning. He had built the new Fermanagh Repeater GB3CP. It's tuning and position were improved that day giving even better coverage, east on the M1 to the Belfast hills, less in West Tyrone, an area well served by GB3WT, and south on the N3 to Kells.

After this meeting, it was good to hear a big increase of mobile traffic on the Fermanagh Repeater and others.

More Information, Michael Clarke, MI5MTC, Chairman Lough Erne AARC, Email [mi5mtc@learc.eu](mailto:mi5mtc@learc.eu)

### Committee Members 2009/10

President: Paul Martin EI2CA  
V/President: Séamus McCague EI8BP

Committee:

Pat Fitzpatrick EI2HX  
Sean Donelan EI4GK  
Ger McNamara EI4GXB  
James Holohan EI4HH  
Peter Grant EI4HX  
Brendan Minish EI6IZ  
Mark Condon EI6JK  
Sean Nolan EI7CD  
Joe Ryan EI7GY  
Ger Gervin EI8CC  
Charlie Carolan EI8JB  
Pat O'Connor EI9HX

## Limerick Radio Club

### Annual General Meeting

The AGM of Limerick Radio Club took place on 25 February 2010 in the Limerick Institute of Technology. There was a very good turnout of members on the night and the following officers were elected.

Chairman	Dermot Gleeson EI2GT
Treasurer	Tony Condon EI2AW
Hon. Secretary	Ger McNamara EI4GXB
Committee	Simon Kenny EI7ALB Mike Griffin EI4FMB John Edgeworth EI6IW Michael Kingston EI2IX

Events being planned for the club during 2010 include participation in VHF/UHF & HF Field Days, Major HF Contests, CASHOTA activations and some special events stations are also in the planning stages.

A number DF Hunts will also take place during the Summer months and will hopefully be an enjoyable day out for all the family (the fox may also have a good day out Hi!). Members wishing to take part in any of the club activities should contact Ger McNamara EI4GXB or any committee member.

A scheduled maintenance visit by 6 club members, is taking place as this issue of Echo Ireland goes to press, to the 2m repeater site on Tountinna to erect the final sections of the new tilt over tower and to erect the new antenna, which will give improved coverage throughout the country.

As the club have incurred major expense to provide this new tower, it would be greatly appreciated if users would contribute towards the repeater fund.

The annual contribution for use of the repeater is only €30. When you consider that we provide not only the 2m repeater but also the 70cms repeater and of course IRLP & Echolink, it is not fair that amateurs that constantly use the repeater facilities do not pay toward the upkeep.

Please send all contributions to Treasurer Tony EI2AW QTHR.

### Limerick Rally 2010

The annual rally of Limerick Radio Club took place on Sunday 7<sup>th</sup> March 2010 in the Radisson Hotel, Ennis Road, Limerick. Though we had no representation from ICOM or Yaesu from the UK this year due to economic conditions, we had a total of 174 people attend.

Graham from BHI in the UK did attend and reported swift sales throughout the day. EI traders who attended include, JBT Trading, Long Communications and Southeast Communications, all of whom reported steady sales of new & used equipment throughout the day.

A large number of bring & buy tables were in use and some very good bargains were to be had if you were in quick with your wallet!!

Mentioning wallets, some moths were seen coming from certain wallets during the day Hi! As usual tickets for the annual raffle sold very quickly and the following were winners.

1 <sup>st</sup> Prize	Noise Eliminating Speaker	EI3GAB
2 <sup>nd</sup> Prize	Dinner for 2 at the Radisson Hotel	EI2IX
3 <sup>rd</sup> Prize	Icom Goodie Bag	EI3JF

We would like to thank BHI UK, The Radisson Hotel and Icom UK for their generous sponsoring of the raffle prizes.

Next years rally is already being planned and we look forward to welcoming everyone back again, and would like to extend our thanks to all that attended and who make our rally a popular event every year and we hope everyone met old and made new acquaintances.

73 de Ger EI4GXB  
Hon. Secretary



# VHF & Up Roundup with Trevor Dunne EI2GLB

ei2glb@hotmail.com

Hi and welcome to the latest edition of VHF Roundup.

While the HF bands have been alive with activity over the last few weeks, VHF has been very quiet.

## 6 Metres

First off looking at 6metres I can find no reported contacts for the month of February. Also just in case anyone was thinking the antenna was not working the 6m beacon EI0SIX is off the air. Tony EI7BMB the beacon keeper hopes to have it back on in the next few weeks.

## 4 Metres

Looking to 4m I see Pat EI8IQ down in Wexford has been spotted on the band making some Meteor Scatter contacts using JT6M. Some of these include G7CNF in England, DL8PM in Germany and OZ1DJJ in Denmark.

Some more good news for 4m operators is that Iceland (TF) has been granted access to the band. So that should be an easy one for us here in EI during the Sporadic E's season in a few months.

## 2 Metres

I gave some points away during the UKAC contest at the start of the month but the band was flat and no real big distance was worked.

EI4DQ was working some Moon bounce and worked EA6VQ Gabriel, the author of the excellent logging program VQ log. He also worked DG8NCO in Germany. Other EI's spotted on 2m were EI3GE and EI9GQ.

## 70cms

No reports of Activity on this band.

## IARU Region 1 Meeting

On the 20/21<sup>st</sup> of February IARU Region 1 held a meeting in Vienna to discuss the VHF and higher bands. Some of the new proposals that came for the meeting are a new band plan for the 6m Band.

The main change in this is to move the Beacon sub band from 50.0-50.080 to 50.4-50.5. There have been many people looking for this it finally happening.

There was another proposal to increase the number of FM repeater channels on

2009 Table							
Callsign	50 MHz	70 MHz	144 MHz	432 MHz	1296 MHz	10 GHz	Totals
<b>EI2GLB</b>	228	48	58	10	0	0	345
<b>EI2JD</b>	239	1	27	5	0	0	272
<b>EI9FBB</b>	258	0	0	0	0	0	258
<b>EI310</b>	179	55	9	0	0	0	243
<b>EI3GYB</b>	164	33	41	3	0	0	241
<b>EI8JK</b>	172	0	54	0	0	0	226
<b>EI4GHB</b>	104	4	82	9	12	8	219
<b>EI8IQ</b>	140	13	46	1	0	0	200
<b>EI7IX</b>	102	44	0	0	0	0	146
<b>EI9FVB</b>	135	0	0	0	0	0	135
<b>EI8GS</b>	134	0	0	0	0	0	134
<b>EI7GL</b>	108	2	1	0	0	0	111
<b>EI4GXB</b>	109	0	2	0	0	0	111
<b>EI7BA</b>	68	0	10	0	0	0	78
<b>EI7BMB</b>	41	0	0	0	0	0	41
<b>EI7IG</b>	26	0	0	0	0	0	26

Updates to ei2glb@hotmail.com

the 2m band and use a 6.25kHz step between them. This was to allow digital repeaters (DSTAR) to fit in between the existing analogue repeaters. This was rejected by the committee.

## 2 Metres Counties Contest

The 2m Counties contest is coming up soon. This years date is Monday the 5<sup>th</sup> of April 2p to 4pm I hope to hear lots of activity on the band for the contest.

## Squares Table

Anyone that has not sent me their totals for the square table should please do so as I want to try to get it finished and on the website.

That's all for this month hopefully by the end of April we will start to see some openings on 6m. So this gives you all a month of so to get all that planned antenna work completed and get on the bands.

As usual please feel free to email me with any band reports or questions  
ei2glb@hotmail.com

Thanks and 73  
Trevor, EI2GLB

## Amateur Radio heads for Venus

Mineo Wakita JE9PEL provides an update on the launch of an Amateur Radio satellite that will head towards **Venus** on May 17 carrying a beacon on 5840.0 MHz.

On the AMSAT Bulletin Board he writes: Four CubeSats in Japan are planning to launch on 17 May 2010 together with PLANET-C which belongs to JAXA by H-IIA rocket.

Launch date, 17 May 2010

Launch time, 21:44:14UTC

Launch site, Tanegashima Space Center in Japan

Three of the CubeSats, Negai\*", WA-SEDA-SAT2, KSAT, being launched by the H-IIA rocket on May 17 will be dropped off into a low earth orbit but UNITEC-1 will continue following the JAXA's Venus Climate Orbiter PLANET-C / AKATSUKI on its journey to Venus.

For more information,

[http://www.jaxa.jp/press/2010/03/20100303\\_h2af17\\_e.html](http://www.jaxa.jp/press/2010/03/20100303_h2af17_e.html)

[http://www.jaxa.jp/index\\_e.html](http://www.jaxa.jp/index_e.html)

<http://www.ne.jp/asahi/hamradio/>

[je9pel/unitec-1.htm](http://je9pel/unitec-1.htm)

Information courtesy of Southgate ARC



# Marconi and Salvan: Dawn of wireless telegraphy

*Ita Marguet, April 2010*

In 2009 a book by the Marconi Foundation, Salvan, Switzerland, was published to commemorate the centenary (1909-2009) of the Nobel Prize in Physics awarded to Guglielmo Marconi, shared with German physicist, Karl Ferdinand Braun, for important radio communications. '**Marconi et Salvan: à l'aube de la télégraphie sans fil**', by Yves Fournier and Freddy Gardiol, (pp.104), adds to the worldwide collection of historic accounts, experiments and pioneering achievements of Guglielmo Marconi (1874-1937).

The book features a collection of family pictures and other archival photographs, with technical charts and maps. Its content provides a wealth of information about the life and work of Guglielmo Marconi. Annexes, Notes and Sources feature a wide selection of Marconi family material and related professional literature. The work of other internationally renowned physicists and scientists are documented in the book.

Prefaces to the book are written by Dr. Hamadan Touré, Secretary General, International Telecommunications Union (ITU), Geneva, and Pascal Couchepin, Federal Councillor and President of the Swiss Confederation in 2003 and 2008. Its authors acknowledge the financial assistance received from Swiss and Valaisan sources.

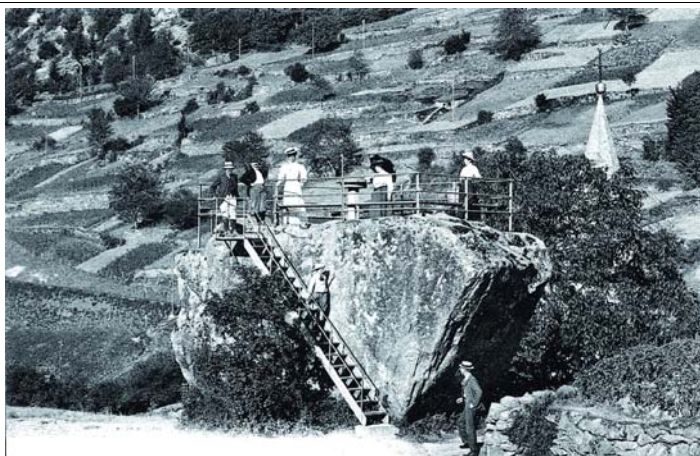
## Dawn of wireless telegraphy

**Marconi Day** is celebrated on 25 April, the date of his birth in 1874. He died in Rome on 20 July 1937. A two-minute silence was observed on radio waves worldwide to commemorate the inventor of the first practical wireless telegraphy who became known as "Father of Radio".

Of Irish and Italian parentage, from an early age Marconi developed a passion for the sciences and studied physics at the technical institute of Livorno and the University of Bologna. In 1894 after reading an article describing Hertz's experiments on electromagnetic waves, he became obsessed and while at Andorno near Santuario di Oropa in the Italian Alps, started to develop a system using these waves to communicate without wire.

In the summer of 1895 he travelled to the health resort of Salvan already famous beyond Swiss borders and, with the help of a local teenager Maurice Gay-Balmaz, Marconi worked for a month and a half progressing with his experiments to send a message at a distance of more than a kilometre. He succeeded and thus wireless was born. It took many years for the real significance of Marconi's pioneering achievement to be recognised.

Situated above Martigny in the region of the Valais in the Swiss Alps, at Salvan the Marconi Museum with its equipment and a dedicated walking trail has attracted many visitors and dignitaries from around the world. In recent times the site has been honoured by the professional and international community with plaques and commemoration of the highest order, most recently by the International Telecommunications Union, in the presence of Dr. Hamadan Touré, Secretary General, ITU, in Geneva.



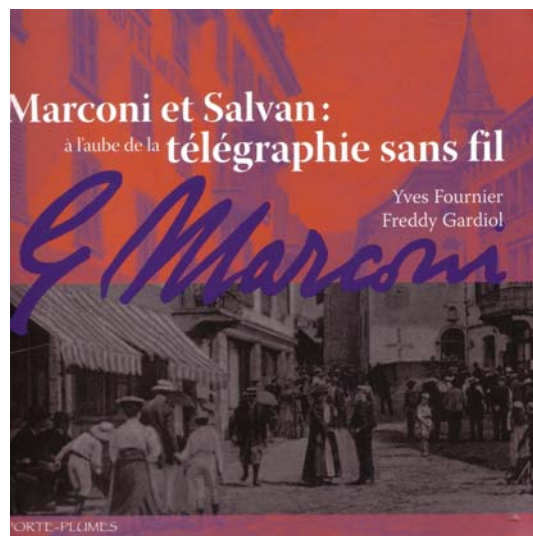
Pierre Bergère (Shepherdess Stone).

During a visit on 9 September 2007 with a delegation from the ITU, Dr. Hamadan Touré declared "*Coming to Salvan is in fact a pilgrimage. As an engineer in satellite communications and ITU Secretary General, it is a privilege for me. Tomorrow's world will be more and more placed under the sign of Hertzian communications and the great inventor Marconi will remain forever a guide for all of us*".

On 26 September 2008, in the presence of ITU representatives and dignitaries from the scientific and cultural spheres, a ceremony was held to place a French language plaque on the Pierre Bergère or Shepherdess Stone. It gives recognition to Salvan as ... a 'cradle of telecommunications' and confers the first universal distinction of 'Telecommunication Heritage'. The ITU plaque renders homage to the invaluable contribution of the site at Salvan as ... telecommunications patrimony.

Visitors to Salvan are encouraged to visit a new exhibition and walk along the Marconi trail that begins at the museum and ends at the house in the village where he stayed. The Shepherdess Stone can be visited nearby.

**Note:** Acknowledgement is given to sources used in preparation of this text. It follows published articles on **Wireless telegraphy:** Switzerland and Ireland (2004), **Ireland and Wireless Telegraphy** "Wavelengths of time" (2005), **Salvan: Cradle of Wireless:** Guglielmo Marconi (1874-1937) (2006), **Guglielmo Marconi:** 'Telecommunications Heritage' (2009), **Nobel Prize Centenary:** Guglielmo Marconi (2009) by Ita Marguet.





## Excerpt from the HX files

### A Look at ATV with Pat Fitzpatrick EI2HX - Excerpt 009

Hello and welcome to excerpt 009 of the HX files.

#### Last time.

In the last issue of Echo Ireland I showed you the 23cms Tx/Rx unit attached to an aerial.

Photo 1, was taken of the near finished unit with cables and control box. The way the control box is made I can easily add some extra cable if I want to use it portable instead of mobile, at the moment the cable is long enough to reach from the roof rack to the inside of the car where the switching can be done safely, as you would not want the cables wrapping around the steering wheel and/or the gear lever.

I am sure some of the /mobile amateurs amongst us have had a scare or two with the microphone cable wrapping around them. I am sure you all have the "hands free" ones fitted now.

I would be thinking of perhaps a bit more power for the portable use, I will have to wait and see what I get at the rallies.

In photo 2, you can see the Tx/Rx switching unit sitting on top of the transceiver and in photo 3, you can see some of the aerials I can use with the transceiver whether I go portable or mobile.

The middle and bottom aerials are Slot aerials, the middle one has some heat shrink covering the aerial, and the bottom one has no covering on it so that you can see the "Slot".

The Slot aerials come with just a high tech length of white waste pipe with a bung on top to keep the rain out.

In photo 4, you can see some of the different brackets and fittings I can use to bolt the transceiver on the roof rack or a pole.

#### Portable.

With the weather getting better (it was when I was writing this) and the days getting longer it's time to think of going portable.

I will be getting out the portable 1.2.GHz gear and 10 GHz transceiver, dish and the tripod in photo 5.

The first job to do was to knock the dust and cobwebs off the gear, and to try them out at home, even if they were working when you stored them you never know what might happen when they are left idle and trying them at home is better than setting up portable and finding out that you have a fault or two.

Last year I used a small generator (1 kw) and I decided this year to experiment (amateur does not sound the same) and use a dc to dc converter as they are small and thus less weight and space. This dc-dc would only be powering an old analogue satellite receiver and bringing the generator would also mean bringing a petrol can, mains lead and the more you bring (the more you could forget) and the time that can be lost setting up and having fun.

I am trying to find a small platform stand like your local hardware may have but with no luck yet, as I could use it as a portable bench and storage case.

I did make one out of MDF but I found this heavy and the MDF would split even with little use and the right screws used, and also swelled in our slightly moist weather,

There is no photo of that prototype as I got a night of heat in the fire with it.

And finally.

Thanks yet again to the photo studio of Thos EI2JD.

I hope to see you all at the I.R.T.S. dinner and AGM in Dundalk on the 24<sup>th</sup> & 25<sup>th</sup> of April,

Best 73 de Pat EI2HX





## Silent Key EI9GE

We are sorry to tell you of the sudden death on 13th February of Pat Kane EI9GE of Bray Co. Wicklow. Pat was a great CW man and a keen observer of propagation particularly on 10 metres. To his wife Nora, his daughter Karen, his sons Andrew and Aaron and to his extended family we extend our sincerest sympathy. May he rest in peace.

## Special Event Ferry Operations Enter Final Weeks

EI2GBW and GB2EI, special event stations celebrating the return of the Cork to Swansea ferry, enter their final weeks of operation.

Unfortunately, the intended maritime mobile operations aboard MV Julia had to be cancelled at the last minute. This was due to refusal by the Department of Transportation to issue the ship's passenger certificate if the amateur station was allowed to operate on board. Regular operations of EI2GBW will continue until 2nd April and GB2EI until 30th April.

QSL cards are sent to all stations worked, and the 'Spirit of Innisfallen Award' certificate is available for working both special event stations. Full details are on the EI2GBW page at [qrz.com](http://qrz.com).

## LORAN-C

LORAN-C shut down On February 8 the U.S Coast Guard shut down the Loran-C a navigation system that has been in use since World War II. LORAN (Long Range Navigation) made use of a network of Low Frequency (LF) radio transmitters and the receivers used these multiple signals to determine the location and speed of the vessel. It has served mariners and aviators well for over 60 years.

## Geopark Weekend

This years Geopark Communication weekend takes place over the weekend of 22 May – 23 May. Radio stations from around the world will be exchanging greetings over the airwaves with Radio Operators operating special event stations from Geoparks of which there are 53 Parks of this status worldwide.

## Crossakiel Amateur Radio Association

Crossakiel Amateur Radio Association (EI4CARA) who are based in Crossakiel, Kells, Co. Meath had their Annual General Meeting on the 17th of February 2010.

Committee appointments are as follows:-

President: Gary EI3GIB  
Vice President/Secretary: Alan EI5GFB  
Treasurer: Steven EI4GKB

The Crossakiel Amateur Radio Association (EI4CARA) meet every Wednesday at 8.30pm in the Welcome Wagon in Crossakiel. All are welcome to come along and attend. The club frequency is 145.550MHz.

For more information please visit their website <http://ei4cara.crosakiel.com> or contact them on email: [ei4cara@crossakiel.com](mailto:ei4cara@crossakiel.com).

For more information about Crossakiel and a location map, please visit <http://www.crosakiel.com>.

## Events/Talks for Crossakiel Amateur Radio Association

Richard Hendy from the Dundalk Amateur Radio Society will be coming to CARA to talk about all aspects of the Echolink system from the basics right up to the technical side of setting up of a local Echolink repeater. For radio operators who are not familiar with Echolink, here is a brief description of what Echolink is:-

EchoLink software allows licensed Amateur Radio stations to communicate with one another over the Internet, using voice-over-IP (VoIP) technology.

The program allows worldwide connections to be made between stations, or from computer to station, greatly enhancing Amateur Radio's communications capabilities. There are more than 200,000 validated users worldwide and growing! — in 162 of the world's 193 nations — with about 4,000 online at any given time.

For members and non-members who are interesting in learning how to use Echolink via their radio or using Echolink via their computer system, this will be very interesting and educational. Date to be confirmed. Please visit the website <http://ei4cara.crosakiel.com> for more information.

## Further Events/Talks

Crossakiel Amateur Radio Association would like amateurs who have knowledge of specific areas of radio to come down to the club and give a talk on their radio related chosen subject. Internet access and other facilities are available, so don't be shy, we are a friendly bunch of guys looking to expand our knowledge of radio and to promote radio. So just give us a call or email us and we will arrange a night with you for the talk and inform our members when it is taking place.



## CARA Officers

Steven EI4GKB - Treasurer; Gary EI3GIB - President ;  
Alan EI5GFB - Vice President/Secretary



# AMSAT History in Review

by Charlie Carolan EI8JB

The following is a Paper presented to the National Aerospace and Electronics Conference, Dayton, Ohio, 23-27 May 1994, by Keith Baker, KB1SF, and Dick Jansson, WD4FAB.

## AMSAT History

The story of AMSAT actually begins in Australia in 1969. There, a group of students at the University of Melbourne had pieced together an amateur satellite that would evaluate the suitability of the 10 meter Amateur Radio band as a downlink frequency for future satellite transponders. It would also test a passive magnetic attitude stabilization scheme (another AMSAT first), and demonstrate the feasibility of controlling a spacecraft via uplink commands. Unfortunately, the completed satellite languished as launch delay followed launch delay. At about that same time, a group of Radio Amateurs with space-related experience in the Washington DC area met to form what initially became known as the East Coast version of the West Coast Project OSCAR Association.

As a result of this meeting, AMSAT, The Radio Amateur Satellite Corporation, was born. The new AMSAT organization selected, as its first task, to arrange for the launch of OSCAR 5. After some modifications by AMSAT members (again working mostly in their basements and garages) OSCAR 5 (later to be called Australis-OSCAR 5, or simply AO-5) was successfully launched on a National Aeronautics and Space Administration (NASA) vehicle. Previous OSCARs had all been launched using US Air Force rockets. The OSCAR 5 satellite performed nearly flawlessly.

AMSAT is a worldwide group of Amateur Radio Operators who share an active interest in building, launching and then communicating with each other through non-commercial Amateur Radio satellites. By any measure, AMSAT's track record has been impressive. Since its founding 41 years ago, AMSAT has used predominantly volunteer labour and donated resources to design, construct, and, with the added assistance of international government and commercial agencies, successfully launch, over 30 Amateur Radio satellites into Earth orbit.

The Radio Amateur Satellite Corporation (as AMSAT is officially known) was formed in 1969 chartered in the District of Columbia. Its aim is to foster Amateur Radio's participation in space research and communication. Since that time, other like-minded groups throughout the world have formed to pursue the same goals. Many of these groups share the "AMSAT" name. While the affiliations between the various groups are not formal, they do cooperate very closely with one another. For example, international teams of AMSAT volunteers are often formed to help build each other's space hardware, or to help launch and control each other's satellites.

The many spacecraft designed and constructed by Radio Amateurs since 1961 can be roughly classified by their intended function into three Phases. Phase I designs comprised the low Earth orbit (LEO), short lifetime, predominantly beacon-oriented satellites such as OSCARs I, II, III, and the Russian Iskra 1 and 2 series of spacecraft.

Phase II series OSCARs are also LEO "birds", but are launched into somewhat higher orbits, and are designed for much longer lifetimes. These AMSAT satellites included OSCARs 6, 7, and 8, as well as UoSAT OSCARs 9 and 11, both of which were built by a team of AMSAT members and students at the University of Surrey in England. These satellites have since been followed by a series of both analog and packet radio satellites which were launched by a variety of AMSAT groups from several countries into similar orbits. One large subset of Amateur Radio satellites are called MICROSATs, as they consist of very small cubes, only 9 inches square, designed to carry one or more store-and-forward digital transponders. These satellites make up the bulk AMSAT satellites currently in orbit.

The Phase III satellites were each designed to be launched into a highly elliptical orbit first pioneered by the Soviet Union. These satellites, which include OSCARs 10 and 13, offer their users much longer access time, higher power and more diverse communication transponders. What's more, these so called "high altitude" satellites also offer their users far larger communications foot-

prints than the LEO satellites. In some cases Phase III satellites can "see" nearly an entire hemisphere of the Earth at the same time, allowing users the luxury of simultaneous contacts on one or more continents.

While worldwide AMSAT organizations are now largely responsible for the design and construction of the modern day Amateur Radio satellites, the term "OSCAR" is still being applied to most satellites carrying Amateur Radio. However, most Amateur Radio satellites are not usually assigned their sequential OSCAR numbers until after they successfully achieve orbit and become operational. Even then, an OSCAR number is only assigned after its sponsor formally requests one. If the satellite subsequently fails in orbit, or it re-enters the Earth's atmosphere, its OSCAR number is usually retired, never to be issued again.

Since its birth in 1969, AMSAT has grown into an international organization that has spun off a number of affiliate organizations in other countries. While the affiliations between the groups are not formal, they do often enter into one-time agreements to help each other with space-related projects.

AMSAT's major source of operating revenue is obtained by offering yearly or lifetime memberships in the various international AMSAT organizations. Membership is open to Radio Amateurs and to others interested in the amateur exploration of space. Modest donations are also sought for tracking software and other satellite related publications at Amateur Radio gatherings. In addition, specific spacecraft development funds are established from time to time to receive both individual and corporate donations to help fund major AMSAT spacecraft projects. For instance, such a fund has now been established at AMSAT's North American headquarters to help support the Phase 3-D project.

The voice transponder capabilities of AMSAT satellites also offer users a variety of operating modes from Morse Code (CW) to Single Sideband (SSB) and Frequency Modulation (FM) voice. In addition, some OSCARs even allow their users to send and receive slow and fast scan



television pictures to similarly equipped stations anywhere on the globe.

Ground station equipment to work these satellites is also easily obtainable and relatively inexpensive and enough commercial Amateur Radio equipment to assemble a ground station capable of interacting with any of the AMSAT satellites now in orbit. Whether for the digital or analog modes, this equipment can also usually be obtained if not home brewed.

As the missions of the OSCAR satellites have become more and more sophisticated, so, too, have the methods employed for OSCAR spacecraft attitude control and stabilization. However, they have not necessarily become more complex. Transponder antennas, even the fairly simple ones, have directivity characteristics. That's why spacecraft attitude control is important to maintain useful communication links.

OSCAR spacecraft stabilization techniques run the gamut from simple bar magnets to computer controlled, active electromagnet systems for spin stabilization and attitude control. The latter type of system is currently being used in the Phase III spacecraft. It senses both Earth and Sun positions, processes this data in an on-board computer, and then electronically controls three sets of onboard electromagnets to achieve the proper spin rate and stabilization.

Other AMSAT spacecraft use gravity-gradient systems and magnetometry for attitude sensing. A rather elegant, yet simple design is currently being employed by AMSAT's MICROSAT series. These very small satellites use simple bar magnets mounted along the sides of the spacecraft to achieve "up and down" stability while in orbit. As with many other AMSAT spacecraft, antennas for the MICROSATs are made from ordinary flexible measuring tape!!

This design has since proven to be both highly reliable and very effective in keeping the MICROSATs properly oriented. It employs yet another KISS approach to spacecraft control by using the spacecraft's onboard antennas to obtain spin stabilization energy directly from the Sun.

While donated labor and salvaged materials help keep the cost of designing and building AMSAT satellites to a minimum, these are not the only areas of

spacecraft operations that AMSAT has been able to achieve significant savings. In spite of all its other accomplishments, AMSAT does not have its own in-house launch capability! Most OSCAR satellites have been launched into orbit by riding as an extra passenger on a government or commercial agency's booster.

However, AMSAT has taken this "piggyback" concept one step further in recent years. By employing a number of innovative design techniques that trade knowledge, skill and manufacturing capacity for a reduction (or outright waiver) of launch costs, AMSAT has also helped create additional launch capabilities for commercial launch providers in return for significantly lower cost access to space.

One of the most exciting examples of this concept is illustrated by the ASAP structure developed as a joint venture between the European Space Agency (ESA) and AMSAT. In the late 1980's, AMSAT was in the process of building its MICROSAT series of small satellites. Obtaining a launch opportunity for not one, but six of these planned satellites posed a rather daunting challenge. However, AMSAT volunteer engineers approached ESA with an idea of how they might exploit some of the then unused space on their Ariane IV launch vehicle.

To make a long story short, in partnership with ESA, AMSAT helped design and manufacture a very large carrying structure, called the Ariane Structure for Auxiliary Payloads (ASAP) for use in launching small satellites. The structure fits around the base of the Ariane IV's upper stage, and it served as the platform from which all six of AMSAT's first MICROSATs were placed into orbit by ESA in 1990. In return, AMSAT obtained a significant reduction in launch costs. ESA has since used the ASAP structure to launch similar, albeit mostly commercial, satellites into orbit.

Thus, using a classic example of the "you scratch my back and I'll scratch yours" approach, AMSAT obtained a virtually gratis launch opportunity while also advancing the state of the art in the space sciences. At the same time, AMSAT helped a commercial launch agency find a new way to improve the quality of its launch services and generate added revenue. The story of AMSAT is one of simplicity, selfless donation of time and resources, and a pioneering spirit. The Amateur Radio Operators of Project

OSCAR, and their later counterparts in AMSAT, have built and launched over 30 OSCAR satellites since 1961. Their efforts are largely responsible for many of the commercial satellite technologies we take for granted today.

Real-time satellite communications technologies ranging from voice transponders to digital store-and-forward techniques to multiple satellite launch adapters that allow simultaneous launch of small satellites were all outgrowths of the vision of AMSAT members and the actual fabrication of space-qualified materials by many of them in their basement workshops. What's more, AMSAT was pioneering small satellite technology when "big" satellites were being touted in the commercial and government sector as "the only way to go". Now, a number of billion dollar commercial ventures are poised to launch constellations of hundreds of similar small satellites for digital store-and-forward messaging. These satellites will exploit many of the technical breakthroughs that were first pioneered by AMSAT.

AMSAT's management approach is designed to optimize technical excellence in a "not-for-profit", "all-volunteer" environment. However, commercial and governmental agencies can still draw some valuable lessons from AMSAT's KISS approach. The results are simple, yet highly reliable, innovative and cost-effective designs for spacecraft hardware and software. Indeed, the lack of vast amounts of available working capital forces AMSAT designers to seek out the most cost-effective satellite hardware and software designs. In addition, the continued use of proven technologies for similar applications, even where those technologies might be viewed in the commercial world as "ancient", also keeps costs low. Finally, the creative use of redundancy and cooperative effort between AMSAT, universities, and launch agencies helps each activity keep their respective services cost-effective. Hardware and software documentation is kept to an absolute minimum. What is published is accomplished in only enough detail so that hardware or software items can be duplicated in the future if need be.

Many people may scoff at a bunch of "amateurs" who work in their basements and garages to build space satellites. However, the past and present volunteers of AMSAT are "amateurs" only in the

*(Continued on page 20)*

(Continued from page 18)

sense that the Wright Brothers, Marconi or Robert Goddard were "amateurs".

The latter were pioneers who used available materials and creativity to design, build and operate devices whose modern day counterparts we now take for granted. That same pioneering spirit has been a hallmark of AMSAT's technical and managerial approach since its founding in 1969.

For the past 25 years international AMSAT groups have played a key role in significantly advancing the state of the art in the space sciences, space education and space communications technology. Undoubtedly, the work now being done by AMSAT's volunteers throughout the world will continue to have far reaching, positive effects on the very future of Amateur Radio communication, as well as other governmental, scientific and commercial activities in the final frontier.

The nearly 20 operational Amateur satellites now orbiting the Earth are a living testament to the spirit and vision of AMSAT's membership. Rarely has a group of volunteers managed to do so much ...for so many...with so little.

There are many International AMSAT organisations worldwide. Membership is open to everyone. Member benefits vary from group to group, most produce a Journal or Magazine and some have a variety of other Member material available.

AMSAT UK is a very active group and has an impressive skill set of knowledge and experience available. The group are very friendly and welcoming and in addition to their Journal 'Oscar News' they also have a Weekly HF Net for updated information exchange and a way for Amateurs with an interest to meet on HF. The AMSAT UK Weekly net is open to everyone with an interest, membership is not required for participation. The net meet every Sunday at 10.00AM on 3.780+/- QRM.

Some of the various AMSAT International websites are listed below.

[www.amsat.org](http://www.amsat.org) NA  
[www.uk.amsat.org](http://www.uk.amsat.org) UK & Ireland  
[www.amsat-dl.org](http://www.amsat-dl.org)

Welcome to the new calls heard / worked on the 'birds' 73 Charlie EI8JB.

## Radio Fun

Peter Mac Dougall MCII, EI-299-G7VEW

*The receiver, the antenna - and the only accessories you really need, the headphones.*

It's true, many of us also use a RX antenna tuner, a station list and a log book too but, basically the three items in the heading are, to me essential.

Headphones, or earphones, if you like, were probably in common use before the loudspeaker. They give not only privacy but more easily copied audio without the distractions that may be heard in a normal background.

### **The very first 'tip' is; NEVER have them too loud.**

Permanent hearing loss can result from too high an audio signal so close to your sensitive ears.

There are several styles and types of earphones.

The most modern example is the tiny stereo 'ear-bud', on a very thin lead.

These come with most MP3 devices and small portable receivers, 'Walkman' CD and cassette players and, to be frank, they're not much good.

I have a little Philips pair that retracts into a spring-loaded coil/case which is handy for 'travelling light' but if I buy a new item I give away or recycle the ear buds, I just can't get on with them.

All ears are unique, so why do manufacturers think that 'one-size-fits- all'?

One of the pesky little blighters might stay in one of my ears for a while but the other is bound to fall out every time. (And why does all modern kit have to be so small anyway? I was much happier with 'chunky stuff. You knew you'd got a *real* 'Wireless' in the good old days!)

Next come the 'street style' headphones. Their pitiful lead is also thin but they do have a band across the top which is adjustable for most head sizes and they are usually padded with foam rubber, with a spare set of covers for when they inevitably wear out. (And don't get me started on 'built-in obsolescence!') Often there is a volume control fitted in the lead, which is useful if the control on the RX is a bit awkward. Many modern sets are. They are standard issue with most of the upmarket portables but wait, there are better, like the hi-fi stereo headphones to match your component-based FM tuner, CD player or turntable. They are usually very good; they have full 'all-round-the-ear' luxury pads and give you maximum pleasure from stereo radio and audio.

As do professional radio studio headphones like the top-of-the-range Beyer DT100s used in most radio stations and recording studios. They also have the benefit of just one sturdy lead, hanging from one ear piece.

When your hands are busy 'mixing' it doesn't get in your way.

But probably the best bet for short wave listening and communications use is a comfortable pair of high quality mono 'phones, just like in those good old days that I'm fond of mentioning. There is no stereo on shortwave, no amateurs or utility operations use it, and, even in a radio studio, I personally find the stereo feed from the desk distracting.

This brings me back to that highlighted 'tip' above. Don't alienate those nearby! If you are on the same train, bus or tram as me *Please* turn the sound down! It's not just the audio; it's the tinny, thumpy so-called 21<sup>st</sup> century music that annoys me!

73 from the grumpy old Teenage Pensioner.



## New Club in North Cork

The North Cork Radio Group was formed in January 2010 by a small group of Amateur Radio enthusiasts and Short-wave Listeners from a web forum idea generated by the clubs founder Anthony Cummins EI3GAB.

Discussions between Anthony and Pat Thompson EI2GHB led Anthony to set about introducing a new forum, the original forum "CorkRadioGroup" was generated live online from the 16/01/2010 until its update to a web page and information resource later the same month.

With the change in site came its own official domain and the adoption of the groups name as it is today.

The forum's sole intention and goal was re-sparking an already present interest in creating a group of open minded enthusiastic individuals with views that looked beyond the old ideals and who could see a newer brighter future for Amateur Radio in Cork.

The Groups first meeting was held on the 24 February 2010 at the Gallery Restaurant & Bar, St. Joseph's Rd, Mallow, Co. Cork.

Membership of NCRG is open to all with a genuine interest in the groups goals and a current amateur licence is not required. Visitors to the groups events and meetings is strongly encouraged and co-community activities are welcomed.

For further information we invite you to join us in our forums, alternatively email us at the club address

info@northcorkradiogroup dot com  
www.northcorkradiogroup.com

Congratulations to all involved in the new club and we wish them well in their endeavours.

## UK Licences

The UK regulator **Ofcom** has published the figures for the total number of Amateur Radio Licences issued as at 28th February 2010.

Foundation	12,908	11,380	+1,528
Intermediate	5,483	4,864	+619
Full/Advanced	51,583	50,942	+641
Club	1,365	1,323	+42
Reciprocal Full	545	492	+53

*Information from Southgate ARC*

## Amateur Radio Emergency Network Statement of Financial Activities for the year ended 31st December 2009 in €

	Note		
<b>Income</b>	1		
Gifts and Donations	2		
Cash		2,130.60	425.12
Non-cash		765.00	2,560.63
Membership Fees	3	450.00	0.00
<b>Total Income</b>		<b>3,345.60</b>	<b>2,985.75</b>
<b>Expense</b>	1		
Equipment & Supplies	2, 4	2,613.96	2,500.00
Insurance	3	286.00	0.00
Account Maintenance Fees		35.50	4.80
Identification Cards	3	202.60	0.00
ebsite Expense		0.00	113.75
Hire of Facilities		0.00	25.00
<b>Total Expense</b>		<b>3,138.06</b>	<b>2,643.55</b>
Net Surplus/(Deficit) of Funds		207.54	342.20
Cash Balance at beginning of year	5	342.20	0.00
Cash Balance at end of year	5	549.74	342.20

## Amateur Radio Emergency Network Notes to Accounts for the year ended 31st December 2009

### General

Amateur Radio Emergency Network ('AREN') is the voluntary public service emergency radio communications network run by the Irish Radio Transmitters Society ('IRTS'). AREN operates under the organisation of and as part of the IRTS and does not have any legal status distinct from the IRTS. The IRTS has the legal status of "unincorporated society".

### 1 Accounting Policies

Accounts are prepared on a cash basis. Therefore, income and expense items are recognized in the year they are received/paid, even if they apply to a different year.

### 2 Gifts and Donations

Equipment and supplies donated to AREN are accounted for both as income and as expense for equipment and supplies purchased, using the actual cost of the equipment if new or the estimated fair value if not new. Cash gifts during 2009 included €1,600.00 received from IRTS. Non cash gifts consisted of donated supplies and equipment including a trailer with a value of €2,500.00 donated during 2008.

### 3 Membership Fees

Membership fees were instituted during 2009 to defray the cost of insurance and identification cards for members. This income and related expense items were not present in 2008.

### 4 Equipment & Supplies

Equipment & supplies were donated and purchased during 2009 in order to outfit a trailer donated in 2008.

### 5 Cash Balances

Cash accounts with Bank of Ireland and PayPal (Europe) S.à.r.l. & Cie, S.C.A. were established during 2008.

Beginning and ending account balances for 2009 are shown below.

	Bank of Ireland	Paypal	Total Cash Balance
Cash balance at 01/01/09	€247.00	€95.20	€342.20
Cash balance at 31/12/09	€493.20	€6.54	€549.74



# AREN in 2010

## Answers to some frequently asked questions by John Ronan EI7IG



### What is AREN?

AREN stands for Amateur Radio Emergency Network. It is a group of licensed radio amateurs who voluntarily make their equipment and time available to their communities. AREN assists Principle Response Agencies (PRA) and other Voluntary Emergency Services (VES) by passing third party radio traffic on their behalf in emergency situations locally, regionally and nationally.

### What are the primary functions of AREN?

The primary reason for the existence of the group is to assist PRAs or other VES in times of emergency. By assisting at community events such as hill walks, triathlons, road races and any other community events that could benefit from the use of radio communications, we provide training opportunities for members as well as publicity for the Amateur Radio hobby in general.

### What is the relationship between AREN and the IRTS?

AREN exists under the umbrella of the Irish Radio Transmitters Society (IRTS), but it is not necessary to be an IRTS member in order to become a member of AREN.

### Are there special licence arrangements in place for AREN activities?

The individuals in AREN undertake all activities while functioning as an "organised group" under the terms of their ordinary Amateur Radio licence, and so no special arrangements are needed.

### Are there difficulties in liaising and working with the professional groups?

Since the inception of the new National emergency plan "A Framework for Major Emergency Management" [<http://www.mem.ie>], there is government policy in place to involve Voluntary Emergency Services in the management of major emergencies.

AREN is specifically mentioned in the main framework document as a possible "fall back" should there be a serious loss or incapacitation of normal communications systems.

### In what way can AREN help the professional services?

Some examples include: during times of prolonged emergency when existing communications links are overloaded or in danger of failing due to human or equipment fatigue; during major disasters when normal communications links are saturated; when short-term communication difficulties arise beyond the scope of existing systems (e.g., an incident in a communications 'black spot' or a system failure); to enable radio communication between different emergency services; during public and sporting events when additional communications resources dedicated to emergency and safety requirements are desirable

### Does AREN receive Government support?

The group consists of licensed individuals who make their time and equipment available on a voluntary basis. The possibility of raising funds for the purchase of commonly held equipment is being examined, but this funding is unlikely to come from Government.

### Do members get paid?

The experimenter's licence precludes any commercial activity, so members are not paid for their time.

### What equipment is available to AREN?

Members use their own equipment, which must be unmodified and maintained in good and fully functioning condition. The group also has the use of a portable repeater and a Mobile Command Post trailer, both of which have been donated. These represent significant contributions from the persons involved and are very much appreciated. AREN "branded" high visibility clothing is currently being investigated.

### Does AREN have a role outside of Emergency Communications?

AREN has provided support at community based activities such as the Women's Mini Marathon, the Galtee/Lug/Maamturk/Comeragh walks, the Sean Kelly Cycle Tour.

All of these provide active training opportunities for groups who exist to either solely become involved in these events or who also make themselves available for emergency communications. The group also has a developing role in promoting the hobby.

Involvement with activities such as field days, lighthouse open days etc. will help to prepare for operations from difficult or awkward locations. This will have a side effect of making the hobby visible to a section of the public who may, as a consequence, also be interested in becoming involved in Amateur Radio.

### I want to become a member of AREN – how much time will I need to dedicate to activities?

At a minimum, you will need to take the time to ensure that you have a fully functioning station that is capable of operating on the VHF, UHF and/or HF allocations.

When you first become involved, you will also need to take time to familiarise yourself with the members handbooks.

The next level of commitment will involve taking part in train-





ing courses and activities. These are designed to develop your communications skills in order to become a useful member of an emergency communications organisation. While we are all able to "ragchew", communicating formal messages is a different skill and one that needs to be practiced

### **How do I join the AREN group?**

Contact any member of the IRTS Committee, or John Ronan, EI7IG on 086 8167310 or ei7ig@aren.ie

### **Are AREN activities covered by Insurance?**

Yes. After much effort, AREN finally has public liability insurance. The cost of this insurance is currently €20 per annum.

Tied in with insurance are Identification Cards. Early on in discussions with the Major Emergency Management working group it was made clear that some form of Identification Card would be required. Many thanks to Gary O'Hanlon of South East Communications who made a donation to the cost of the initial batch of ID-Cards.

Also, there have been other equipment donations from East Cork Contest Group, Hamsoft Communications, EI2DJ, and EI8GS.

### **Does AREN play a role in international Voluntary Emergency Communications?**

AREN forms part of IARU Region One Voluntary Emergency Communication activities.

As such, AREN will strive at all times to develop and maintain friendly working relationships with similar groups in other jurisdictions in order to promote international friendship and understanding (one of the stated aims of the hobby), and also to provide a seamless service to the public in times of emergency where co-operation between international voluntary emergency communications groups and professional organisations can help to preserve the lives and welfare of people.

Greg Mossop, the IARU Region One Emergency Communications Co-ordinator is working very hard at making this a reality.

### **Is there a training programme in place for members?**

Recently at an AREN meeting, part of a draft training program was tested out on those present. Feedback was favourable, but it still needs tweaking. The main member's handbook (plus others) provides information that can be used by members in order to train themselves.

### **What area is covered by the current membership?**

The current membership of the group is available to respond throughout the country.

Membership is distributed throughout Limerick, Clare, Galway, Leitrim, Longford, Waterford, Mayo, Donegal, Kerry, Tipperary, Kilkenny, Wexford, Meath, Louth, Cork and Dublin. We are sure that other groups exist locally in the country that can bring their valuable experience and membership strength to the national AREN organisation. We extend an open invitation to these organisations to participate with AREN.

### **Can I set up a local group in order to provide radio communication for my local community festival?**

Obviously we would encourage everyone to participate in the IRTS and your local active Radio Club or Radio Society.

That said, you are most welcome to contact John Ronan, at 086 816310 or ei7ig@aren.ie to advise and help you in your endeavours.

### **Is this just another talking shop?**

Far from it. We encourage members to participate in all "field day" events, and participate in public service events (use them as exercises). It is only by practicing that we can be sure of providing a useful resource in a real emergency. We plan to organise training exercises, both alone and with other services, in the future. And, of course, none of this precludes the occasional purely "social" event.

### **AREN in 2010**

As mentioned above, the new Framework for Major Emergency Management became policy towards the end of 2008.

As this is a fundamental change to some of the processes and procedures in use for over 20 years, it will probably take a few years for all organisations to get up to speed on the new processes.

As AREN is mentioned in the main document, we took the opportunity to seek invitations to some meetings between the Government Department responsible and other VES. This has resulted in participation in two Regional VES sub-groups and more exposure to other Voluntary Emergency Services.

This process is a fundamental part of the new Framework for Major Emergency Management and AREN needs to become involved in the other Regional VES sub-groups as they form. Recently, with AREN's input, one of the guidance documents, "A Guide to Working with the VES" has been amended to include information on AREN for all services.

While only a small paragraph, this does nonetheless increase AREN's visibility at a national level.

However, for AREN to have any involvement with the PRAs and VESs over the long term, AREN members must regularly meet with, train with and build relationships with those organisations at a local level.

This means AREN needs members, and members must be active at a local level. This means Amateur Radio operators, operators like yourself, dear reader, need to be more active at a local level.

73, and see you on the bands.

John Ronan, EI7IG

ei7ig@aren.ie +353 86 8167310

AREN Co-ordinator



# EI's on EQSL (as at March 11th 2010)

Updates and enquiries to Thos EI2JD at thoscalfrey@hotmail.com

# EI DXCC Listings

(as at March 13th 2010)

DXCC Confirmed		Worked All Zones	
213	EI7BA (+4)	43	EI7IS
174	EI3IO	42	EI/DK2AT
170	EI4CF (+3)	42	EI2KC (New)
161	EI2JD (+1)	42	EI5IX
159	EI9FBB (+4)	41	EI3EBB
150	EJ9FBB	41	EI4JR
148	EI9HX	39	EI6IF
147	EI6IZ	36	EI6GGB
144	EI0CZ	35	EI8GHB
140	EI7CC	34	EI1KARG
130	EI9JU (+7)	34	EI3JB
118	EI9FVB (+5)	34	EI8JW (New)
117	EI6HB (+10)	33	EI1571
115	EI3GYB	33	EI7GM
115	EI8GS	32	EI90GPO
110	EI6AL	30	EI7CHB (+4)
104	EI4GXB	29	EI7JZ (+4))
102	EI6JK	27	EI3GDB
101	EI4BZ	27	EI4DIB (+2)
101	EI8FH (+1)	26	EI4IN
100	EI9HQ (+1)	25	EI2FS
99	EI1DG (+5)	24	EI7IW
99	EI8IU (+1)	22	EI/G4DDL
98	EI7JK (+1)	22	EI8GNB (+2)
92	EI5IF	20	EI0CPL
92	EI7DAR	20	EI2IV
92	EJ9HQ	18	EI4HX
91	EI0W		
90	EI9O (+2)	Worked All States	
87	EI4GNB	50	EI4CF
86	EI9ES	50	EI8GS
82	EI3HA (+9)	50	EI9FBB
81	EI5GM	50	EJ9FBB
79	EJ3HA (+8)	50	EI9HX
77	EI7IX	49	EI9HQ
76	EI8JR	49	EI9JU (+1)
73	EI2II	49	EJ9HQ
73	EI5GUB	48	EI6HB
72	EI4HQ (+1)	47	EI2JD
69	EI8GP	47	EI3IO
68	EI/DH0GSU/p	47	EI7JN (+2)
68	EI5GJB	46	EI9O
68	EI9CF	45	EI4BZ
67	EI4HH	45	EI4IS
65	EI7M	45	EI7BA
65	EI8DD	45	EI8GP
65	EI8DL	44	EI5GM
61	EI4IS	43	EI0W (+1)
61	EI7BFB (+1)	41	EI4GNB
61	EI9JM	41	EI7DAR
60	EI7JN	30	EI4GXB (+10)
59	EI5GSB (+1)	38	EI5IF
58	EI6IL	36	EI9HW
58	EI9JF	35	EI7CC
57	EI8JK	32	EI6JK
56	EI7BMB	31	EI4GMB
55	EI2GLB	30	EI9ES
55	EI6CPB	29	EI9FVB
55	EI7IM (+12)	27	EI5GUB
54	EI7IQ	26	EI6AL
53	EI6ARB	26	EI9JM
50	EI6AK	15	EI8JB
49	EI2FSB	5	EI4IN
49	EI8JB	4	EI4DIB
48	EI8IQ	2	EI7IW
48	EI9EW (+2)		
46	EI1429		

Mixed		272 EI6FR (+7)		17m	
353	EI8H	232	EI9FBB	252	EI7BA
351	EI6S	229	EI4BZ	218	EI9FBB (+29)
347	EI7CC	218	EI6IZ (+4)	108	EI6IZ
341	EI6FR	208	EI2JD (+24)	107	EI3IO
340	EI2GS	178	EI9JF	103	EI2JD (New)
321	EI3IO	160	EI8IU (+26)	15m	
316	EI7BA	119	EI7GY	230	EI7BA
306	EI2HY	109	EI2IH	191	EI9FBB
288	EI9FBB	109	EI4HM	188	EI3IO
269	EI2CR	107	EI/GM4ARJ	171	EI4BZ
262	EI2GX	106	EI1DG	148	EI2JD (+12)
262	EI2JD (+9)	100	EI6AL	109	EI8GS
248	EI9JF	RTTY/Digital		108	EI3GV
242	EI9O (+101)	124	EI6FR (+5)	107	EI6IZ
240	EI4BZ	102	EI6HB	103	EI9FVB
234	EI6IZ	Satellite - No Entry		12m	
211	EI8IU (+22)	160m		158	EI7BA
210	EI6IL	195	EI3IO	121	EI9FBB
205	EI5GM	149	EI7BA	10m	
200	EI9FVB	103	EI6IZ	250	EI3IO
152	EI6HB	80m		185	EI7BA
140	EI4GXB	298	EI6S	156	EI4BZ
134	EI9HQ	202	EI7BA	144	EI7GL
133	EI7GY	180	EI9FBB (+9)	134	EI2JD (+3)
129	EI5GUB (New)	126	EI3IO	128	EI4GK
128	EI8HA	124	EI2JD (+16)	123	EI9FBB
103	EI6AL	110	EI4BZ	104	EI8GS
Phone		101	EI6IZ	6m	
348	EI6S	100	EI6FR (New)	157	EI3IO
345	EI7CC	40m		111	EI7GL
338	EI2GS	234	EI7BA	101	EI3EBB
334	EI8EM	209	EI9FBB (+5)	2m	No entry
331	EI8AR	167	EI3IO	QRP DXCC	
318	EI6FR (+1)	152	EI2JD (+7)	No Entry	
300	EI8AU	145	EI6FR (New)	DXCC Challenge	
277	EI3GV	138	EI6IZ (+11)	1,904	EI7BA
275	EI9FBB (+3)	129	EI4BZ	1,699	EI3IO
272	EI7BA (+11)	117	EI7GL	1,609	EI9FBB
264	EI4GK (+11)	30m		1,521	EI7CC
242	EI2JD (+8)	215	EI3IO	1,363	EI6FR (+21)
229	EI8GS	213	EI7BA	1,144	EI2JD (+114)
213	EI7GL	144	EI6FR (New)	1001	EI6IZ
200	EI6IL	144	EI9FBB	DXCC Honor Roll	
200	EI9FVB	138	EI6IZ	Mixed	
193	EI9JF	110	EI4BZ	338	EI6FR/341
186	EI7II	20m		335	EI2GS/340
177	EI9FE	268	EI9FBB	335	EI6S/351
167	EI4BZ	267	EI7BA	335	EI7CC/347
165	EI2CH	243	EI3IO	Phone	
152	EI8IU (+17)	193	EI2JD (+11)	334	EI6S/348
129	EI9HQ	170	EI4BZ	333	EI2GS/338
119	EI4HH	154	EI6IZ	333	EI7CC/345
114	EI4EX	150	EI9JF	329	EI8EM/334
108	EI6HB	139	EI9FVB		
105	EI1CS	111	EI8GS		
105	EI9HX	110	EI3GV		
101	EI3IP	105	EI9HQ		
CW					
314	EI7CC				
301	EI7BA (+7)				

## Donation of Kia Rio



The December 2009 and February 2010 issues of Echo Ireland told the story of John Riordan EI6IJ and his car.

John is a sufferer from Multiple Sclerosis and was the owner of a Kia Rio car which he purchased in July 2008 and had adapted to enable him to drive using hand controls only.

Mobile operation was accommodated with the installation of a Yaesu FT-857 together with HF and VHF antennas

The progression of his infirmity meant that, by the end of 2009, John was no longer able to drive in a safe manner.

John offered the car to IRTS with a view to the Society raising money that could be spent on projects promoting Amateur Radio to people with disabilities, assisting elderly or infirm Amateurs/SWLs to remain active and, developing programmes within Amateur Radio for the housebound and lonely.

The Society was happy to accept John's generous gesture and in the December issue of Echo Ireland offered the car for sale by tender to its members.

In the event, no offers were received and the car was subsequently offered for sale to the general public.

In recent weeks enquiries were received from individuals within the disabled community together with one very late enquiry from a member of the Society.

The car has now been sold for a satisfactory amount.

The purchaser is a driving instructor who specialises in disabled drivers so the vehicle resumes its functions in transporting people with disabilities.

Obviously, the FT-857 and its related items could not be sold with the car. These were removed prior to sale and have now been disposed of separately.

The IRTS again expresses its appreciation to John EI6IJ for his generosity in donating the car to the Society.

The cash now available will be spent in accordance with John's wishes and plans to put this into effect will be developed in due course.

## Members Advertisements

### For Sale:

Icom IC-756ProIII.

As new, with box & manual. €1,500.00.

Paul EI5DI, 085-1287216

### For Sale:

Kenwood TM-211E 144MHz Transceiver. Manual/schematics, boxed.

May exchange for a Yaesu SP black speaker [FT 1000, FT2000] Filtered.

Ranger RCI-2950 10 & 12 Metre Mobile .....€160.00 o.n.o.

AOR 2001 Scanner .....€100.00

Realistic Scanner Pro43 .....€100.00

Mick EI5DCB at 086-0693873

## Radio News Deadline

### Noon on Thursdays

#### News Editor

**Charlie Carolan EI8JB**

**Input for the radio news  
should be sent via e-mail to:**

**charlie.carolan@ gmail.com.  
or newsteam@irts.ie**

**or by phone to:  
087-6265418**

## Mid Ulster Amateur Radio Club

### Annual Rally

**Saturday 29th May**

**Drumgor Youth Centre,**

**Drumgor Heights,**

**Craigavon.**

**BT65 4AP**

**Doors open 1100**

**For details ring 0044(0)2838348451**

**cqmuarc@googlemail.com**

**www.muarc.com**

Irish Radio Transmitters Society

## The Shop



**10% discount for  
IRTS members  
on Amateur Radio Books**

**Try it today  
www.irtsshop.com**

**Echo Ireland input to  
Dave Moore EI4BZ  
ei4bz@eircom.net  
087-6290574**



*For the best prices around...*

AMATEUR RADIO - CB RADIO - ACCESSORIES

**SCORPION TECHNOLOGY**

**CB Radio's**

**NEW WEBSITE**

**Amateur Radio's**

**Accessories**

**www.scorpiontechnology.ie**

**Tel: 087 9869087**

## The Bangor and District ARS Annual Rally

**Saturday 3rd July**

**Donaghadee  
Community Centre  
BT21 0HE**

**Doors open 1200      Admission £2.00**

### Plenty of attractions include:

Special interest stands, bring and buy, a good selection of radio and computer traders will be in attendance.

The ever popular FREE bring and buy will be running as normal.

More information and a map is available at our website [www.bdars.com](http://www.bdars.com)

Contact Bill GI4AAM for further details:

Tel: 028 9181 6707

Email: [bill.langtry@btinternet.com](mailto:bill.langtry@btinternet.com)

## Lough Erne Amateur Radio Club Enniskillen Amateur Radio Show

**Sunday 11th April 2010**

**The Share Holiday Village,  
Lisnaskea,  
Co. Fermanagh BT92 0EQ**

**Doors open 1130**

Amateur Radio, Electronics, Computers, traders big and small, equipment, accessories, components, new surplus & second-hand, bring & buy, no commission, with traditional attendance from all over Ireland.

**Talk-in on the Fermanagh Repeater, GB3CP**

### Talk on QRP

**George Dobbs, G3RJV**, who is the world's best known QRP author will attend the rally and will give a talk, entitled "QRP - Why and How" in a room near the rally arena. George's talk will be for 40 minutes then questions, with a second one hour session if needed. George will also sign copies of his books, whether brought along or bought at the rally (availability TBA).

### QRP Displays

**Brendan Minish EI6IZ**, from the Mayo Radio Experimenters Network will display Elecraft kits.

**Graham Firth, G3MFJ** will set up the G-QRP Club stall.

**Dom Baines M1KTA** will display home-built kits, receivers, transmitters and accessories.

### EchoLink Display

**Ian Morrow MI1CCU** will mount an EchoLink display at the rally

There have been enquiries about accommodation near the Rally. SHARE is the largest residential activity centre in Ireland and has a guesthouse on site. B&B costs £22.50. For details and bookings contact [celia@sharevillage.org](mailto:celia@sharevillage.org) or phone 048-6772-2122.

**Details from Iain on 048 66326693,  
Email: [iain.gibb101@btinternet.com](mailto:iain.gibb101@btinternet.com)  
[www.lougherneradioclub.co.uk](http://www.lougherneradioclub.co.uk)**

# JBT Trading

**MI0JBT Jim Bob Traynor, Limavady, Northern Ireland**

**Specialising in the supply of new & used amateur and CB radio equipment.**

**Always wanted - good clean used equipment.**

**Tel/Fax: 028 77765045    Mobile: 0774 0721770    Email: jimbobtraynor@utvinternet.co.uk**

**www.mi0jbt.com**

## Used Price List

Linear Amp UK. Ranger 811 H . Very good. 4 valves , 800 watts output with a new spare set of valves	£649.00
Kenwood TS-870S/ Mint. A beautiful radio, double boxed with manual, mic and power lead	£799.00
Kenwood MC-90. Very clean, boxed	£115.00
Kenwood TS-940S. Nice, manual, mic, ATU/PSU	£599.00
Kenwood SP-31. Light signs of wear, filtered speaker	£59.00
Kenwood SW-2100 Good, SWR/power meter 2kw	£90.00
Yaesu FT-2800M. Good, manual, power lead/mic	£110.00
Yaesu FT77. Used, boxed etc	£195.00
Yaesu FC-30. As new, boxed with lead etc.	£149.00
Yaesu FC-700. Clean, boxed	£85.00
Yaesu MD-1. Clean with lead	£65.00
Yaesu MD100. Very clean, boxed	£100.00
Yaesu GS065. New mast head bearing	£49.50
Yaesu FC-80o. As new, with lead	£225.00
AOR. AR-8200 Mk3, mint, boxed etc	£249.00
Icom IC-R70. Used condition. Manual/power lead	£199.00
Icom SM-20. Mint, boxed	£99.00
Icom IC-R3. Mint, boxed etc	£219.00
Icom IC-R7000. Used ,manual	£325.00
Icom IC-7400 Mintboxed with manual etc	£799.00
Icom IC-2725E. Very clean, manual, boxed, power lead with separation leads	£249.00
Icom IC-718. Mint, manual, boxed, power lead etc.	£399.00
Drake T-4X. Nice condition with manual on CD	offers
Drake MS-4. Nice condition	offers
Collins SM-1. Very clean, very rare	£125.00
Watson WM308. As new. Complete	£40.00
Astic Lollipop. Clean, chrome	£69.00
Watson Hunter. New Frequency Finder.	£59.00
Watson FC130 New frequency Finder	£79.00

## New Radio Stock

### Current Price List

Yaesu - FT-7800 .....	£189.00
Yaesu - FT-8800 .....	£269.00
Yaesu - FT-8900R.....	£299.00
Yaesu - FT-817ND .....	£439.00
Yaesu - FT-857D .....	£629.00
Yaesu - FT-897 .....	£629.00
Yaesu - MMB80 - Mounting Bracket for FT897.....	£17.95
Yaesu - FT-450 .....	£589.00
Yaesu - FT-950 .....	£1099.00
Yaesu - MS100A8X - Desktop Microphone .....	£149.95
Yaesu - MD200ASX - Ultra Hi-FI Desktop Mic.....	£242.95
Yaesu - DMU-2000 - Data Management Unit.....	£895.00
Icom - IC-E208 .....	£254.00
Icom - IC-2725E .....	£319.00
Icom - IC-706 MKIIG .....	£729.00
Icom - IC-7000.....	£929.00
Icom - IC-7400.....	£1,329.00
Icom - SM-20 - Base Station Desk Microphone.....	£144.98
Icom - SP-21 - Desktop Speaker for IC7400.....	£74.99
Kenwood TM-D710E .....	£429.00
Kenwood TM-V71E .....	£289.00
Kenwood TS-480SAT.....	£749.00
Kenwood TS-480HX .....	£849.00
Kenwood TS-2000 .....	£1,469.00

## Watson Antennas

Watson W-30 2m/70cm. Base Vertical. Length 1.15m
Watson W-50 2m/70cm. Base vertical. Length 1.8m
Watson W-300 2m/70cm. Base Vertical. Length 3.1m
Watson W-2000 6m/2m/70cm. Base Vertical. Length 2.5m,
Watson WGM-270 2m/70cm. On glass antenna
Watson W-285 2m 5/8th Whip with fold over base. L. 1.33m
Watson W-627 6m/2m/70cm. Tri-band Whip Length 1.6m
Watson W-77LS 2/7cm Dualbander. PL259. Length 0.42m
Watson W-770HB 2m/70cm. Fold over base. Length 1.1m
Watson W-7900 2m/70cm , Fold over base. Length 1.58m
Watson WSM-270 2m/70cm. Mini Mag. Length 0.46m

**Trade-ins are always welcome.**

**All emails will be answered a.s.a.p.**

**Paypal and all major credit cards accepted**

**Always wanted:**

**Good clean used radio gear**

**Cash waiting for your unwanted items**

**Large range of accessories.**

**www.mi0jbt.com**

# South East Communications

**Amateur Radio  
Marine VHF  
Shortwave Receivers  
Scanning Receivers  
GPS Systems  
Accessories**



**Gary O'Hanlon,  
Ashbury House,  
Dunmore East,  
Co. Waterford.  
Tel: 051-385853  
087-2513772**

## Used Equipment

### All prices for straight sales

Alinco DJG7E Tri band handheld, 2m/70cm/1.2GHz	€349.00
Alinco DR635. Dual Band Mobile with wide receive	€249.00
Alinco DX70TH HF + 6m, 100w Mobile. Private Sale	€425.00
Antron 99 Fibreglass Base Antenna, 10/12m	€89.00
AOR 3000A 0-2036 MHz, 400 memories. All Mode	€499.00
AOR 7030 Award winning Rx. 0-30MHz Boxed/mint	€599.00
AOR-8200 MkII, 0-260-0 MHz. All mode handheld	€249.00
Comet CAT 300. New. HF + 6m. 300w manual ATU	€199.00
Comet CMX 2300. New. 3kw SWR/Power Meter 1.8 - 525 MHz	€175.00
Daiwa CN-801. New. 2kw SWR/Power Meter.	
Auto calibrate 1.8-200 MHz	€49.00
Garmin Quest Handheld GPS. Ireland & Europe	€99.00
Icom ICR 8500 0-2000MHz. All mode Base Receiver	€1,199.00
Icom AH-4, HF + 6m Auto ATU	€299.00
Icom IC PCR 1500 PC Based comms Rx 0-3,300 MHz. As new	€79.00
Icom ICR-10 0-1300MHz All mode handheld scanner	€249.00
Icom SM20 Desk Mic. As new condition	€129.00
Icom IC 718 - 100w HF Rig.	€399.00
Icom IC-7200 HF + 6m with rack handles	€725.00
Icom IC-7400 HF/6 & 2m. New. One only	€1,399.00
Icom IC-7400. HF /6m /2m. 100w. ATU. DSP	€999.00
Icom IC-756PRO Boxed & mint	€99.00
Icom IC-7600. Latest HF Rig from Icom	€2,950.00
Icom IC-775 DSP. All filters fitted, 200w. Boxed. Mint	€1,799.00
Icom IC-821H 2m/70cm 45/35w base multi-mode.	€599.00
Icom ICR20. Handheld scanner. 0-3GHz, 260 minutes recording	€275.00
Icom SP-20. Matching speaker for ICOM 775 etc.	€149.00
JRC-NRD545. Top class receiver. Boxed. As new condition	€1,199.00
Kenwood THF7E. 2m/70cm Handie. 1-1300MHz Receive	€199.00
Kenwood TM455E 45w, 70cm multi-mode.	€199.00
Kenwood TMD 700E. Dual Band Mobile. Boxed Mint	€349.00
Kenwood TS-2000. HF/6/2/70cms. Boxed. As new	€1,199.00
Kenwood TS-450AT. Private sale	€599.00
Kenwood TS-570DGE, HF rig with DSP AUTO ATU	€799.00
Kenwood TS-790 2m/70cm/23cm. All mode base stn	€899.00
Kenwood TS-850SAT, Auto ATU. Mint, Boxed	€799.00
Kenwood TS-870SAT. HF Rig DSP + Auto ATU	€1,099.00
Kenwood/Trio TS711E. 2m/25w base multimode	€349.00
Linear Amp UK. 700w 70cm Amp. Bargain	€899.00
MFJ 934 Antenna Tuner/artificial ground	€99.00
MFJ 925 Mighty Mite compact auto ATU. IC706 size. New	€225.00
MFJ-994. 600 Watt Intellituner. Boxed as new	€299.00
Nevada TM 1000. Professional series HF ATU Hi-Power	€299.00
Realistic PRO 2006. 400 mems, 25-1300 MHz Base/Mobile scanner	€199.00
Realistic PRO 2045. 200 memories. Base/mobile scanner	€149.00
Rigblaster Plus multi mode data decoder	€149.00
Solar Panels. 2.4 watts. Comes with cigar charger & croc clips	€39.00
Uniden Bearcat UBC800XLT. Latest Uniden base/mobile scanner	€275.00
Vectronics VL300DLP 300w manual ATU	€149.00
Watson 22 Amp 0-15v PSU. Special offer - New!	€89.00
Yaesu DVS2 Digital Memory recorder for FT1000 etc	€119.00
Yaesu FC-20 Auto ATU for FT-847 etc.	€275.00
Yaesu FT-100MKV Field, Built-in PSU, ATU. Boxed, Mint	€1,399.00
Yaesu FT 450 HF/6m 100w Transceiver, Boxed, as new	€575.00
Yaesu FT-857D HF/6m/2m/70cms - All mode 100w mobile, New	€665.00
Yaesu FT-890 0-30MHz Auto ATU	€549.00
Yaesu FT-902DM. Classic HF Rig, as new condition. Boxed	€399.00
Yaesu FT-990AC with Auto ATU, Built-in PSU	€899.00
Yaesu MD 200A8X. Top class desk mike for all Yaesu rigs New	€219.00
Yaesu SP-8. Matching speaker for FT-1000 etc Boxed, New	€159.00
Yaesu SP-901P. Matching speaker for 101 & 902	€99.00
Yaesu VX5R. Tri band Handheld. Boxed. Good Condition	€199.00
Yupiteru MVT 7300. 1000 channel handheld. 0.5-1320 MHz Rx	€199.00



### AirNav RadarBox

the world's best selling and most advanced Real Time Virtual Radar. Real plug and play and best graphics by far.

**€449.00.**

**Latest 3D Version €549.00**



## W-8681 Wireless Weather Station

### Special Offer

**This month only**

**€99.00**

### \*\*Special Offer\*\*

**Tokyo HL 1.5KFX. 1kW HF/6m Amplifier.**

**R.R.P. €4,449.00 - 1 only at €2,799.00**

### Ameritron AL-811HXCE

**800w Amplifier**

**New.**

**Special Price €1,099.00**



### Eton Satellite 750

**New Top Class S/W Rx  
(replacing the Grundig Satellite)**

**Price ...€349.00**

### \*\*\*Special Offer\*\*\*

**RG213 Mil. Spec. 100m drum €129.00**

**(including delivery - 26 counties)**

**C.O.D. - Next Day Delivery [www.sec.ie](http://www.sec.ie)**

*We stock a wide range of used equipment and a full range of new Icom, Yaesu, Kenwood, Alinco, Watson, Cushcraft, MFJ, Diamond, Uniden Radios and Accessories.*